

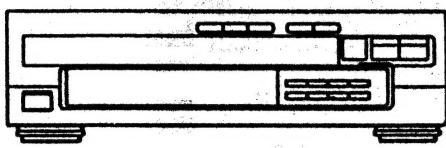
aiwa



DX-Z9100M

MANUAL

SERVICE



COMPACT DISC PLAYER

• BASIC CD MICROPHONE (KSM-2000KEM)

• DIREC

DX-Z9100M is the Compact Disc Player
which is connected to below systems.

• Z-D3100M • Z-D7100M • Z-D8100M • Z-D9100M

● Only the modifications are stated in this manual.
Use this manual with DX-Z950M Service Manual
(S/M Code No.0106).

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

VAROITUS!

Laitteen käyttäminen muilla kuin tässä käytööhöjeessä mainitulla tavalla saattaa altistaa käytäjän turvalisuuksia 1 yli-täytyville näkymättömälle lasersäteilylle.

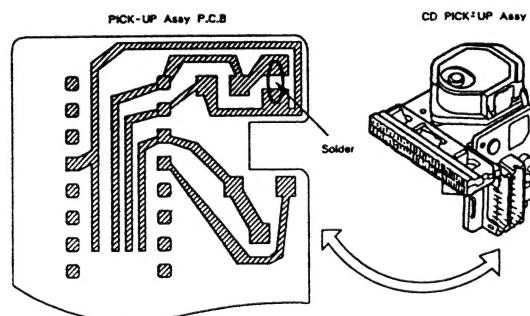
VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

Precaution to replace Optical block (KSS - 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure to ground body and workbench, and use care the clothes do not touch the diode.

- After the connection, remove the solder shown in the right figure.



SPECIFICATIONS

Disc	Compact disc	Wow/Flutter	Unmeasurable
Scanning method	Non-contact optical scanner (semiconductor laser application)	Signal to noise ratio	92 dB (1 kHz, 0 dB)
Laser	Semiconductor laser ($\lambda = 750\text{-}800 \text{ nm}$)	Harmonic distortion	0.01% (1 kHz, 0 dB)
Rotation speed	Approx. 500 rpm - 200 rpm (CLV)	Low pass filter	8 times digital filter + active filter
Error correction	Cross Interleave, Reed Solomon code	Power consumption	15 W
No. of channels	2 channels	Dimensions (WxHxD)	360 x 98.5 x 308 mm (14 1/4 x 4 x 12 1/4 in)
D-A conversion	1-bit DAC	Weight	3.8 kg (8.4 lb)

• Design and specifications are subject to change without notice.

■ ACCESSORIES/ PACKAGE LIST

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
If can't understand for Description please kindly refer to “REFERENCE NAME LIST”.

REF. NO	PART NO.	カタリ NO.	DESCRIPTION
1	84-VM1-901-010	IB, Y	

ALTERNATION LIST

ELECTRICAL MAIN PARTS LIST

DESCRIPTIONで判断できない物は“REFERENCE NAME LIST”を参照してください。
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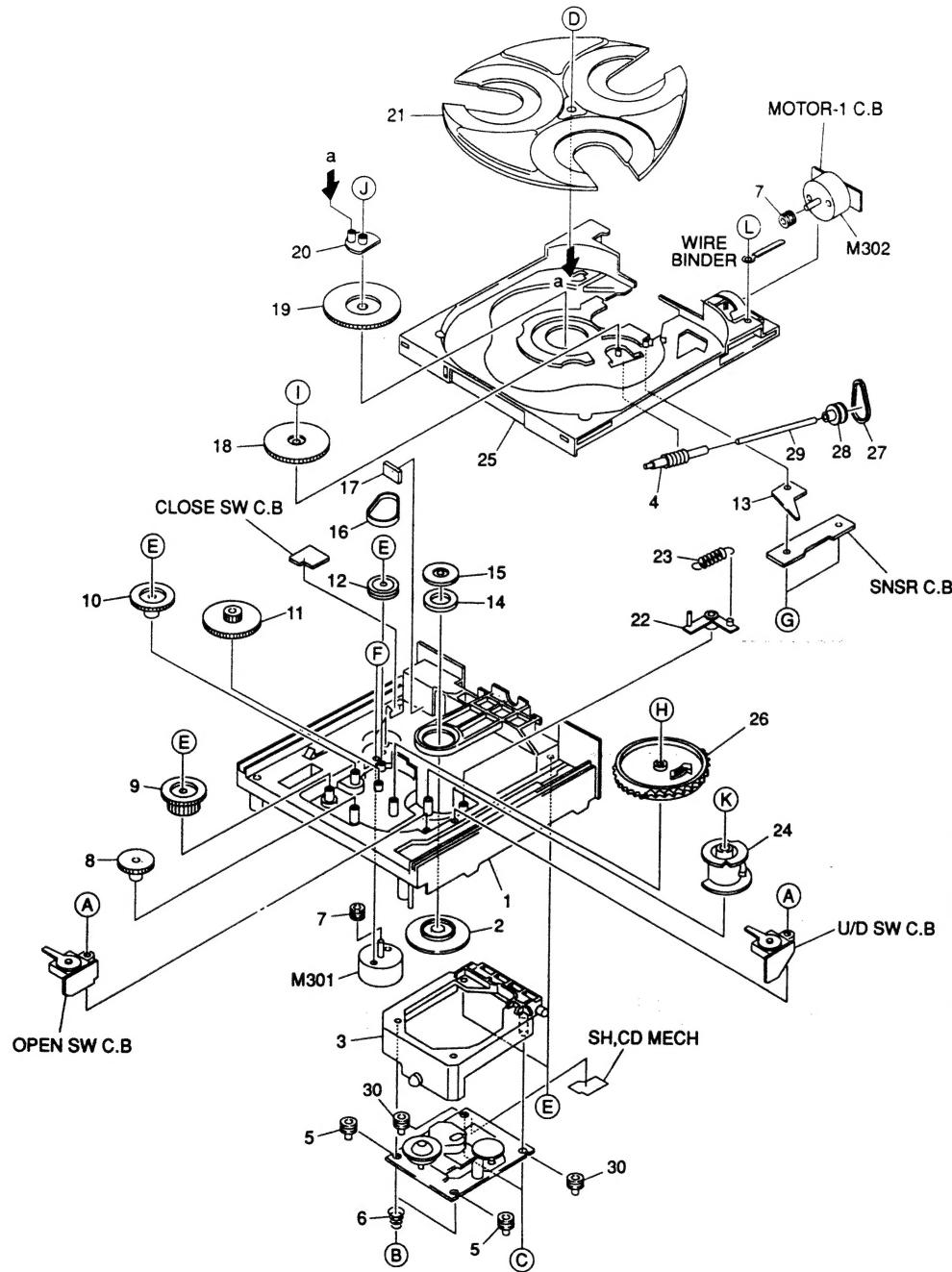
REF. NO	PART NO.	カタリ NO.	DESCRIPTION	REF. NO	PART NO.	カタリ NO.	DESCRIPTION
IC	82-VM1-601-110	IC, CXP50120-1590		SW714	87-036-215-089	SW, TACT	EV021404M
				SW715	87-036-215-089	SW, TACT	EV021404M
				SW716	87-036-215-089	SW, TACT	EV021404M
				SW717	87-036-215-089	SW, TACT	EV021404M
				SW718	87-036-215-089	SW, TACT	EV021404M
MAIN C. B	C527	87-018-209-019	CAP, TC-U 0.1-50F	SW719	87-036-215-089	SW, TACT	EV021404M
TACT-1 C. B				SW705	87-036-215-089	SW, TACT	EV021404M
				SW706	87-036-215-089	SW, TACT	EV021404M
				SW707	87-036-215-089	SW, TACT	EV021404M
				SW708	87-036-215-089	SW, TACT	EV021404M
				SW709	87-036-215-089	SW, TACT	EV021404M
				SW710	87-036-215-089	SW, TACT	EV021404M
				SW711	87-036-215-089	SW, TACT	EV021404M
				SW712	87-036-215-089	SW, TACT	EV021404M
				SW713	87-036-215-089	SW, TACT	EV021404M
MOTOR-2 C. B				SW101	91-572-086-110	LEAF SW	

EXPLODED VIEW - 1

MECHANICAL PARTS LIST

REF. NO	PART NO.	カタリ NO.	DESCRIPTION
1-1~1-6	09-057-206-010	CAB1, FRONT ASSY	
1-5	84-VM1-001-019	CAB, FR	
1-17	84-VM1-003-019	PANEL, TRAY	
1-18	84-VM1-002-019	PANEL, REAR YBN(Y)	
1-18	84-VM1-005-019	PANEL, REAR YJB(YJ)	
1-21	82-VM1-002-019	CAB, STEEL	

EXPLODED VIEW - 2



MECHANICAL PARTS LIST - 2

DESCRIPTIONで判断できない物は "REFERENCE NAME LIST" を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

REF. NO	PART NO.	カタリ NO.	DESCRIPTION	REF. NO	PART NO.	カタリ NO.	DESCRIPTION
2-1	81-ZG1-243-219		CHAS. MECH NO2	2-26	81-ZG1-015-010		GEAR, TRAY CAM BLU
2-2	81-ZG1-228-11K		HLDR. MAGNET	2-27	81-ZG1-233-110		BELT, TT
2-3	81-ZG1-253-310		HLDR. MECH MK2	2-28	81-ZG1-236-010		PULLY, TT MO
2-4	81-ZG1-276-110		WORM GEAR, TT NO2	2-29	81-ZG1-260-010		SHAFT, WORM S
2-5	81-ZG1-230-010		G-CUSH, MECH	2-30	80-CD3-214-010		CUSH CD A
2-6	81-ZG1-231-110		SPR-C, MECH	2-A	81-653-215-010		SPECIAL SCREW, VT2
2-7	81-ZG1-212-010		PULLY, LOAD MO	2-B	81-ZG1-254-010		S-SCREW, MECH HLDR
2-8	81-ZG1-250-010		GEAR, TRAY RELAY MK2	2-C	81-ZG1-271-010		S-SCREW, MECH REAR
2-9	81-ZG1-019-010		GEAR, TRAY B YEL	2-D	81-ZG1-239-010		S-SCREW, TT
2-10	81-ZG1-018-010		GEAR, TRAY A YEL	2-E	87-067-945-110		VFT2+3-12(F10)
2-11	81-ZG1-017-010		GEAR, RELAY RED	2-F	87-251-071-410		U1.2-6-4
2-12	81-ZG1-014-010		PULLY, RELAY YEL	2-G	87-067-579-010		BVT2+3-8W/0 SLOT
2-13	81-ZG1-240-010		SPR-P, BORN	2-H	81-ZG1-264-010		S-SCREW, CAM
2-14	87-036-326-010		MAGNET, CLAMPER 93	2-I	87-761-095-410		VFT2+3-8
2-15	81-ZG1-255-119		PLATE, MAGNET MK2	2-J	87-078-029-010		VFT2+3-13(F8)
2-16	81-ZG1-232-010		BELT, TRAY	2-K	87-078-061-010		VFT2+3-20DIA10, GLD
2-17	81-ZG1-239-110		CUSH, TRAY IN	2-L	87-721-096-419		QT2+3-10
2-18	81-ZG1-222-010		WORM WHEEL, TT				
2-19	81-ZG1-202-010		GEAR MAIN				
2-20	81-ZG1-252-010		LEVER, TT MK2				
2-21	81-ZG1-010-210		TURNTABLE NO3				
2-22	81-ZG1-020-010		PLATE, CAM BGE				
2-23	81-ZG1-262-010		SPR-E, CAM S				
2-24	81-ZG1-016-010		GEAR, MECH CAM BGE				
2-25	81-ZG1-011-310		TRAY MK2				

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP, TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PT, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC, CAP	CAP, CERA-SOL
THMS	TERMINATOR
TR	TRANSISTOR
TRIMMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XITAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER
セラコン	SERGESEUPPRESSOR
セラコン	CAP, CERA

サービス技術ニュース	
番号	連絡内容
G -	
G -	
G -	

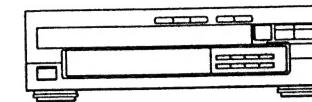
アイワ株式会社
AIWA CO.,LTD.

aiwa

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESIVE	ADHESIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOADING MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL
ジアベ	ARM SHAFT
ビン	GUIDE SHAFT
ビンビン	STRAP
ビンビン	STRAP
エスベ	STRAP
S-SCRW	S-SCREW
HINGE	HINGE
S-SCRW	S-SCREW
SCRW, SERRAT	SCRW, SERRAT

DX-Z950M

SERVICE
MANUAL

COMPACT DISC PLAYER

• BASIC CD MECHANISM: KSM-2101ABM

◆ DX-Z950M are Compact Disc Player

connected to below systems.

- XS-Z1000M
- XS-Z860M
- CX-Z1000M
- XS-Z750M
- XS-Z900M
- CX-Z750M
- CX-Z900M

SPECIFICATIONS

Disc	Compact disc
Scanning method	Non-contact optical scanner (semiconductor laser application)
Laser	Semiconductor laser ($\lambda = 750\text{-}800 \text{ nm}$)
Rotation speed	Approx. 500 rpm - 200 rpm (CLV)
Error correction	Cross Interleave, Reed Solomon code
No. of channels	2 channels
D-A conversion	1-bit DAC
Wow/Futter	Unmeasurable
Signal to noise ratio	92 dB (1 kHz, 0 dB)
Harmonic distortion	0.01% (1 kHz, 0 dB)
Low pass filter	8 times digital filter + active filter
Power consumption	15 W
Dimensions (WxHxD)	360 x 98.5 x 308 mm (14 1/4 x 4 x 12 1/4 in)
Weight	3.8 kg (8.4 lb)

• Design and specifications are subject to change without notice.

CAUTIONS WHEN SERVICING

Model DX-Z950M do not have a power circuit. These equipment use a 11-pin flat cable to receive the power supply and to output and input signals.

When servicing these equipment, connect them to the devices as shown in Table 1. If the equipment in Table 1 is not available, follow the procedure below.

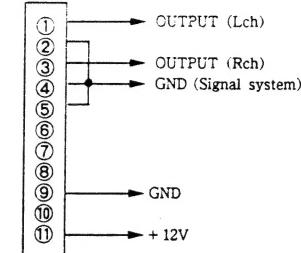
[Repairing a single machine]

① Supply the following voltage to each terminal from the external power supply.

Table 1

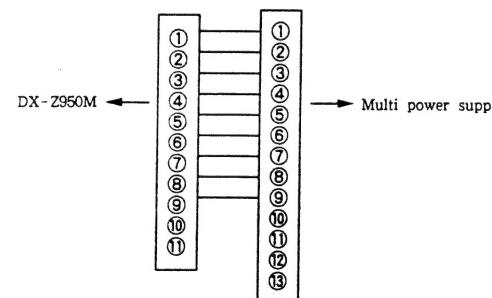
- XS - Z1000M
- CX - Z1000M
- XS - Z900M
- CX - Z900M
- XS - Z860M
- XS - Z750M
- CX - Z750M

CON101



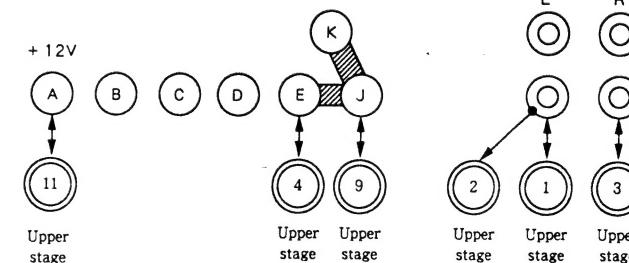
② Multi Power Connection diagram (LPS-9088)

Connect the multi-conversion harness for F550 to the J1 connector.



Connect diagram of multi-conversion harness.

■	: Short bar
↔	: Jumper cable
→	: Pin plug's ground cable
○	: Power output terminal
◎	: Relay terminal
◎	: Pin jack



DISASSEMBLY INSTRUCTIONS

1. "Cabinet, Steel" Removal (See Figure-1)

- 1) Remove 5 screws (Ⓐ) and remove "Cabinet, Steel".

2. "Cabinet, Front" Removal (See Figure-1)

- 1) Remove 5 screws (Ⓑ×4, Ⓢ×1) and remove the "Cabinet, Front".

3. "Panel, Rear" Removal (See Figure-1)

- 1) Remove 4 screws (Ⓒ) and remove the "Panel, Rear".

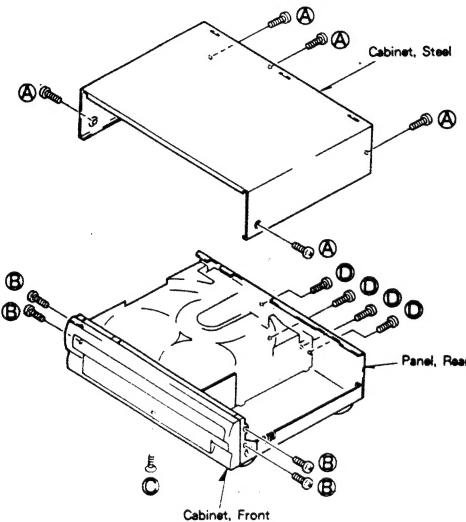


Fig - 1

4. "Mechanism ASSY" Removal (See Figure-2)

- 1) Remove 4 screws (Ⓐ) and remove the "Mechanism ASSY".

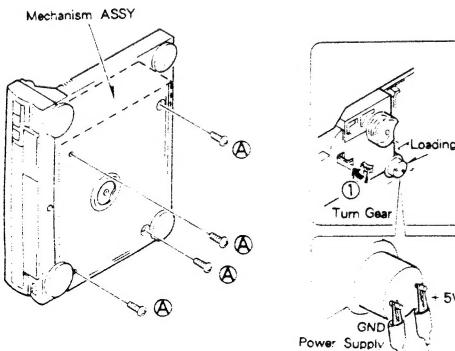


Fig - 2

5. "Main Circuit Board" Removal (See Figure - 3)

- 1) Remove 6 hooks unsolder the soldered points and raise the "Main Circuit Board".
- 2) Remove 8 connectors and remove the "Main Circuit Board" in the direction of the arrow.

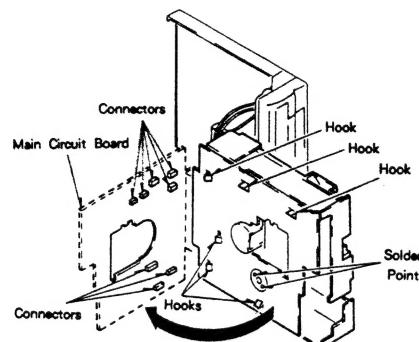


Fig - 3

6. "Tray" Removal (See Figure - 4)

- 1) Open the "Tray".
- ★ To open manually
Turn gear in the direction of arrow ① with your fingers.
- ★ To open automatically
Connect the power supply to the loading motor and open the "Tray".
- 2) While pushing the hook in the direction of the arrow ② as shown in the figure, remove the "Tray" in the direction of arrow ③.
- 3) Remove screw (Ⓐ) and remove the "Turntable".

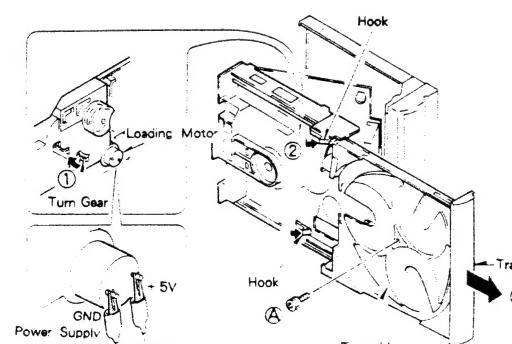


Fig - 4

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



■ Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.

■ **Advarsel:** Usynlig laserstråling ved åbning, når sikkerhedsafbryder er ude af funktion.
Undgå utsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muilla kuin lässä käytöohjeessa mainitulla tavalla saattaa altistaa käytäjän turvallisuusluokan 1 ylittävälle näkymätömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstråling, som överskrider gränsen för laserklass 1.

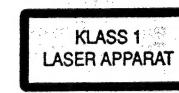
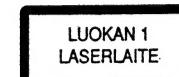
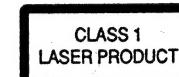
CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

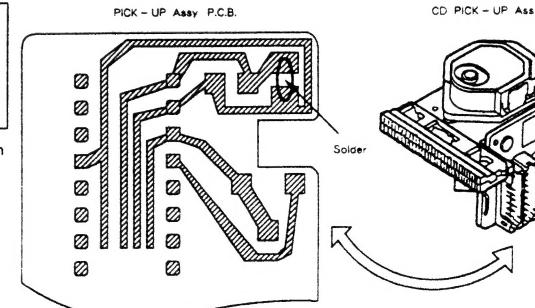


Precaution to replace Optical block

(KSS - 210A)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

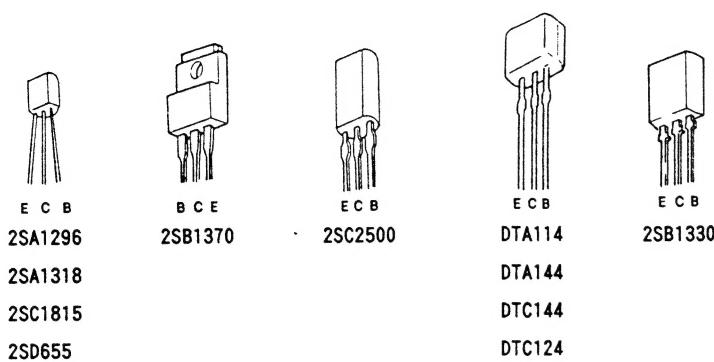
- 1) After the connection, remove solder shown in the right figure.



ELECTRICAL MAIN PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
====C====								
	87-002-639-010	IC, BA6296FP	C230	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	FC701	★82-VM1-615-010	FLAT CABLE, 3-2, 0-160
	87-001-184-010	IC, CXA1081S	C231	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	LED701	89-VW5-606-010	LED, SLH-38MC 70F-90 (◀PLAY/PAUSE)
	87-001-400-010	IC, CXA1082S	C303	★87-010-400-019	CAP, ELECT 0.47-50 SME	LED702	87-002-316-010	LED, SEL 2415E GRN (▶)
	87-001-944-010	IC, CXD1167Q	C305	★87-018-132-019	CAP, CERA-SOL SS 2200P-16 X	LED703	89-VW5-526-010	LED, SLH-38MC 70F-90 (■STOP/CLEAR)
	81-VM1-636-010	IC, CXP50116-3920	C307	★87-010-248-019	CAP, ELECT 220-10	LED704	87-002-315-010	LED, SEL 2415E GNN (■)
	87-002-211-010	IC, GP1F32T(DIGITAL OUT)	C309	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	SW701	87-036-259-018	SW, TACT SKH/BB (■STOP/CLEAR)
	87-002-394-010	IC, LB1641	C310	★87-010-374-019	CAP, ELECT 47-10	SW702	87-036-259-018	SW, TACT SKH/BB (◀PLAY/PAUSE)
	87-002-348-010	IC, NJM4580D	C401	★87-010-262-019	CAP, CERA-SOL SS 100-10	SW703	87-036-270-019	SW, TACT 2SKOCAA (▶)
	87-020-881-019	IC, NJM78L05A	C402	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	SW704	87-036-270-019	SW, TACT 2SKOCAA (■)
	87-002-984-010	IC, TC9237BN	C404	★87-010-400-019	CAP, ELECT 0.47-50 SME	SW706	87-036-259-018	SW, TACT 2KHVBB (RANDOM)
====TRANSISTOR====								
	89-112-964-019	TRANSISTOR, 2SA1296Y	C405	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	SW707	87-036-259-018	SW, TACT 2KHVBB (PROGRAM)
	89-113-187-019	TRANSISTOR, 2SA1318TU	C406	★87-018-131-019	CAP, CERA-SOL SS 100P-50 B	SW709	87-036-259-018	SW, TACT 2KHVBB (TIMER PROGRAM)
	89-213-302-019	TRANSISTOR, 2BS1330Q	C501	★87-016-113-019	CAP, ELECT 4700-16 VR	SW710	87-036-259-018	SW, TACT 2KHVBB (DELITE)
	89-213-702-019	TRANSISTOR, 2SB1370E	C503	★87-018-209-019	CAP, CERA-SOL SS 0.1-50 F	SW711	87-036-259-018	SW, TACT 2KHVBB (DISPLAY)
	89-318-155-019	TRANSISTOR, 2SC1815GR	C504	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	SW712	87-036-259-018	SW, TACT 2KHVBB (EDIT-A1)
	89-318-154-019	TRANSISTOR, 2SC1815Y	C505	★87-010-404-019	CAP, ELECT 4.7-50 SME	SW713	87-036-259-018	SW, TACT 2KHVBB (EDIT-CONT)
	89-325-002-319	TRANSISTOR, 2SC2500	C506	★87-010-374-019	CAP, ELECT 47-10	SW714	87-036-259-018	SW, TACT 2KHVBB (1)
	89-406-555-019	TRANSISTOR, 2SD655E	C512	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	SW715	87-036-259-018	SW, TACT 2KHVBB (OPEN/CLOSE)
	87-026-572-019	TRANSISTOR, DTA114TS	C513	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	SW716	87-036-259-018	SW, TACT 2KHVBB (DISK CHANGE)
	87-026-486-019	TRANSISTOR, DTA144TS	C516	★87-010-260-019	CAP, ELECT 47-25 SME	SW717	87-036-259-018	SW, TACT 2KHVBB (DISK CONT, SKIP)
	87-026-291-019	TRANSISTOR, DTC124XS	C522	★87-010-406-019	CAP, ELECT 22-50 SME	SW718	87-036-259-018	SW, TACT 2KHVBB (3)
	87-026-218-019	TRANSISTOR, DTC144ES	C526	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	SW719	87-036-259-018	SW, TACT 2KHVBB (2)
====DIODE====								
	87-020-870-019	DIODE, 1S1585	C527	★87-018-200-019	CAP, CERA-SOL SS 3900P-16 X	====TACT-2 CIRCUIT BOARD SECTION====		
	87-020-465-019	DIODE, 1S133	C528	★87-010-263-019	CAP, ELECT 100-10	SW705	87-036-259-018	SW, TACT 2KHVBB (POWER)
	87-002-608-019	DIODE, DSF10TC	C529	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	====PHOTO CIRCUIT BOARD SECTION====		
	87-002-850-019	DIODE, ZENER HZ428	C531	★87-010-221-019	CAP, ELECT 470-10	PH601	87-026-573-010	P-SENSOR, GP1S3V
====MAIN CIRCUIT BOARD SECTION====								
C101	★87-010-405-019	CAP, ELECT 10-50 SME	C533	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	====MOTOR-1 CIRCUIT BOARD SECTION====		
C102	★87-010-405-019	CAP, ELECT 10-50 SME	C552	★87-018-209-019	CAP, CERA-SOL SS 0.1-50 F	M101	87-045-305-010	MOTOR, RF-500TB (TURN TABLE MOTOR)
C103	★87-018-127-019	CAP, CERA-SOL SS 470P-50 B	C556	★87-016-113-010	CAP, ELECT 4700-16 VR	====MOTOR-2 CIRCUIT BOARD SECTION====		
C104	★87-018-127-019	CAP, CERA-SOL SS 470P-50 B	C557	★87-010-381-019	CAP, ELECT 330-16 SME	M103	9X-262-513-210	MOTOR GEAR ASSY (SLED)
C107	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL	C559	★87-018-196-019	CAP, CERA-SOL SS 1500P-11	M104	9X-262-513-310	MOTOR ASSY (W/CHASSIS, T. T.) (SPINDLE)
C108	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL	C561	★87-010-263-019	CAP, ELECT 100-10	SW101	91-572-085-110	LEAF SW (INSIDE LIMIT)
C109	★87-018-117-019	CAP, CERA-SOL SS 68P-50 SL	C562	★87-010-370-019	CAP, ELECT 330-6, 3 SME	====SWITCH-1 CIRCUIT BOARD SECTION====		
C110	★87-018-117-019	CAP, CERA-SOL SS 68P-50 SL	C563	★87-018-115-019	CAP, CERA-SOL SS 47P-50 SL	SW603	87-036-109-010	PUSH, SW (CLOSE SW)
C111	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL	C564	★87-018-128-019	CAP, CERA-SOL SS 47P-50 SL	====SWITCH-2 CIRCUIT BOARD SECTION====		
C112	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL	C565	★87-018-128-019	CAP, CERA-SOL SS 560P-50 B	SW601	87-036-271-010	LEVER, SW (UP/DOWN SW)
C113	★87-010-404-019	CAP, ELECT 4.7-50 SME	C566	★87-010-404-019	CAP, ELECT 4.7-50 SME	====SWITCH-3 CIRCUIT BOARD SECTION====		
C114	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	C567	★87-018-131-019	CAP, CERA-SOL SS 1000P-50 B	SW602	87-036-271-010	LEVER, SW (OPEN SW)
C115	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	C568	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	====MISCELLANEOUS====		
C116	★87-010-260-019	CAP, ELECT 47-25 SME	C569	★87-018-088-372-010	FILTER, EMI BL 01RN1	98-848-127-110	OPTICAL PICK UP KSS-210A	
C117	★87-010-263-019	CAP, ELECT 100-10	C570	★87-018-088-372-010	FILTER, EMI BL 01RN1	★89-VT5-202-010	BUSHING, CORD	
C118	★87-010-263-019	CAP, ELECT 100-10	C571	★87-018-088-372-010	FILTER, EMI BL 01RN1	CON101	★89-VX5-618-010	FLAT CABLE 11P FG
C119	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL	F101	★87-008-394-019	FILTER, CERAMIC CST 4.19MGW			
C120	★87-018-113-019	CAP, CERA-SOL SS 33P-50 SL	FC101	★82-VM1-616-010	FLAT CABLE 5-2-175			
C121	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	FL101	★81-VM1-637-010	FL 78T-171GK (DISPLAY)			
C122	★87-010-263-019	CAP, ELECT 100-10	J104	87-002-211-010	IC, GP1F32T(DIGITAL OUT)			
C130	★87-018-209-019	CAP, CERA-SOL SS 0.1-50 F	L301	★87-003-147-019	COIL, 22UH			
C201	★87-018-132-019	CAP, CERA-SOL SS 2200P-16 X	L401	★87-003-147-019	COIL, 22UH			
C202	★87-018-134-019	CAP, CERA-SOL SS 0.01-16 Y	L502	★87-007-311-010	COIL, OSC DOCON V			
C203	★87-018-202-019	CAP, CERA-SOL SS 6800P-16 X	L801	★87-003-147-019	COIL, 22UH			
C207	★87-010-405-019	CAP, ELECT 10-50 SME	M102	87-045-305-010	MOTOR, RF-500TB (LOADING MOTOR)			
C211	★87-018-199-019	CAP, CERA-SOL SS 3300P-16 X	R410	★87-025-407-019	RES, MF 100K-1/8W			
C212	★87-010-403-019	CAP, ELECT 3.3-50 SME	R412	★87-025-407-019	RES, MF 100K-1/8W			
C213	★87-010-382-019	CAP, ELECT 22-25 SME	△R507	★87-029-129-091	RES, FUSE 3.3-1/4W			
C216	★87-010-374-019	CAP, ELECT 47-10	△R522	★87-029-129-090	RES, FUSE 3.3-1/4W			
C220	★87-018-133-019	CAP, CERA-SOL SS 4700P-16 X	SFR101	★87-024-169-010	SFR, 2.2K DIA6V			
C221	★87-010-401-019	CAP, ELECT 1-50 SME	SFR103	★87-024-173-010	SFR, 22K DIA6V			
C222	★87-010-401-019	CAP, ELECT 1-50 SME	SFR301	★87-024-173-010	SFR, 22K DIA6V			
			X102	★87-030-270-019	XTAL RESONATOR 16.9344MHZ			

TRANSISTOR ILLUSTRATION



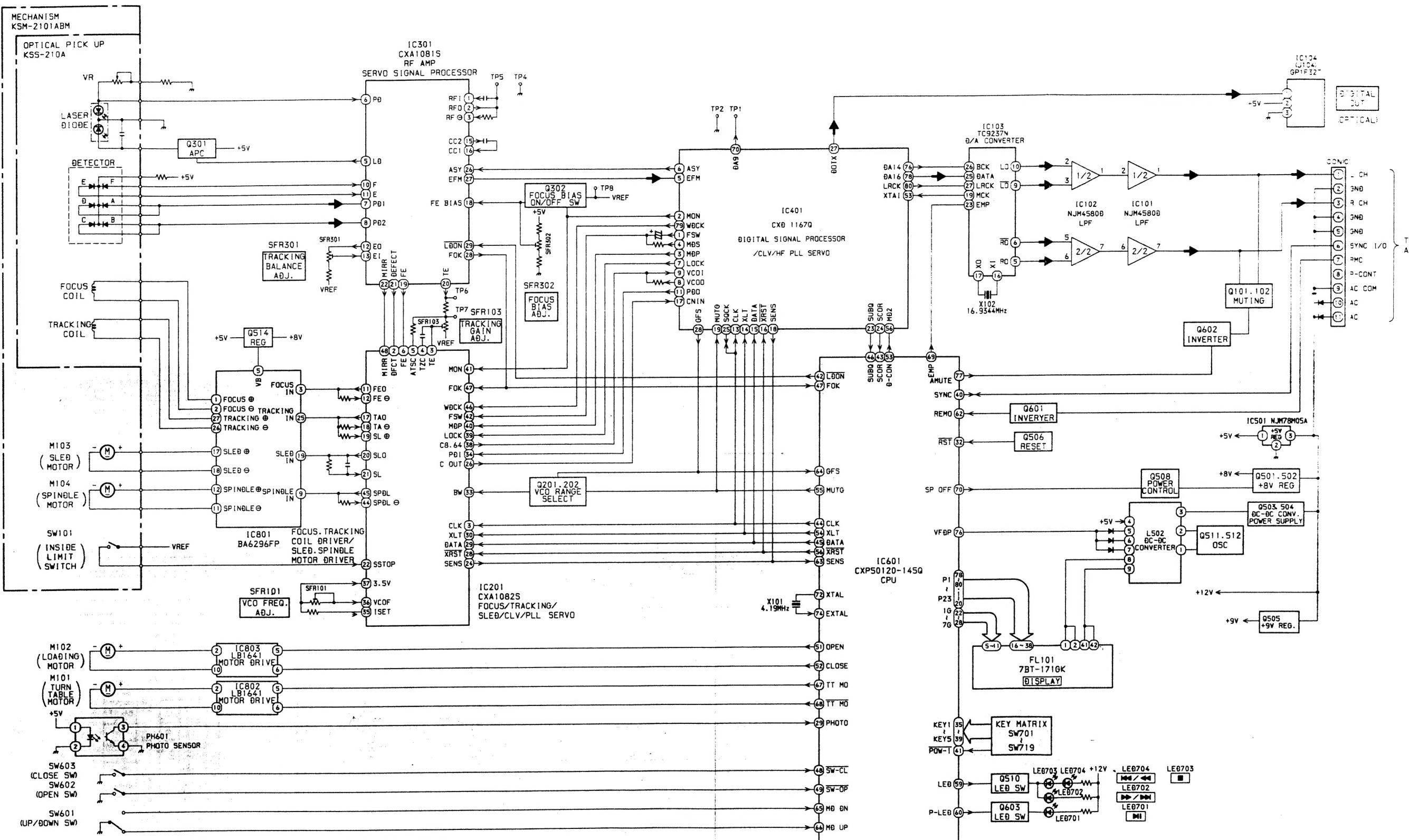
See the DX - N350M for the IC description below

	DX - N350M	DX - Z950M
①	IC, CXP50120 - 145Q	IC, CXP50120 - 145Q
②	IC, CXD1167Q	IC, CXD1167Q
③	IC, CXA1081S	IC, CXA1081S
④	IC, CXA1082S	IC, CXA1082S
⑤	IC, TC9237N	IC, TC9237N

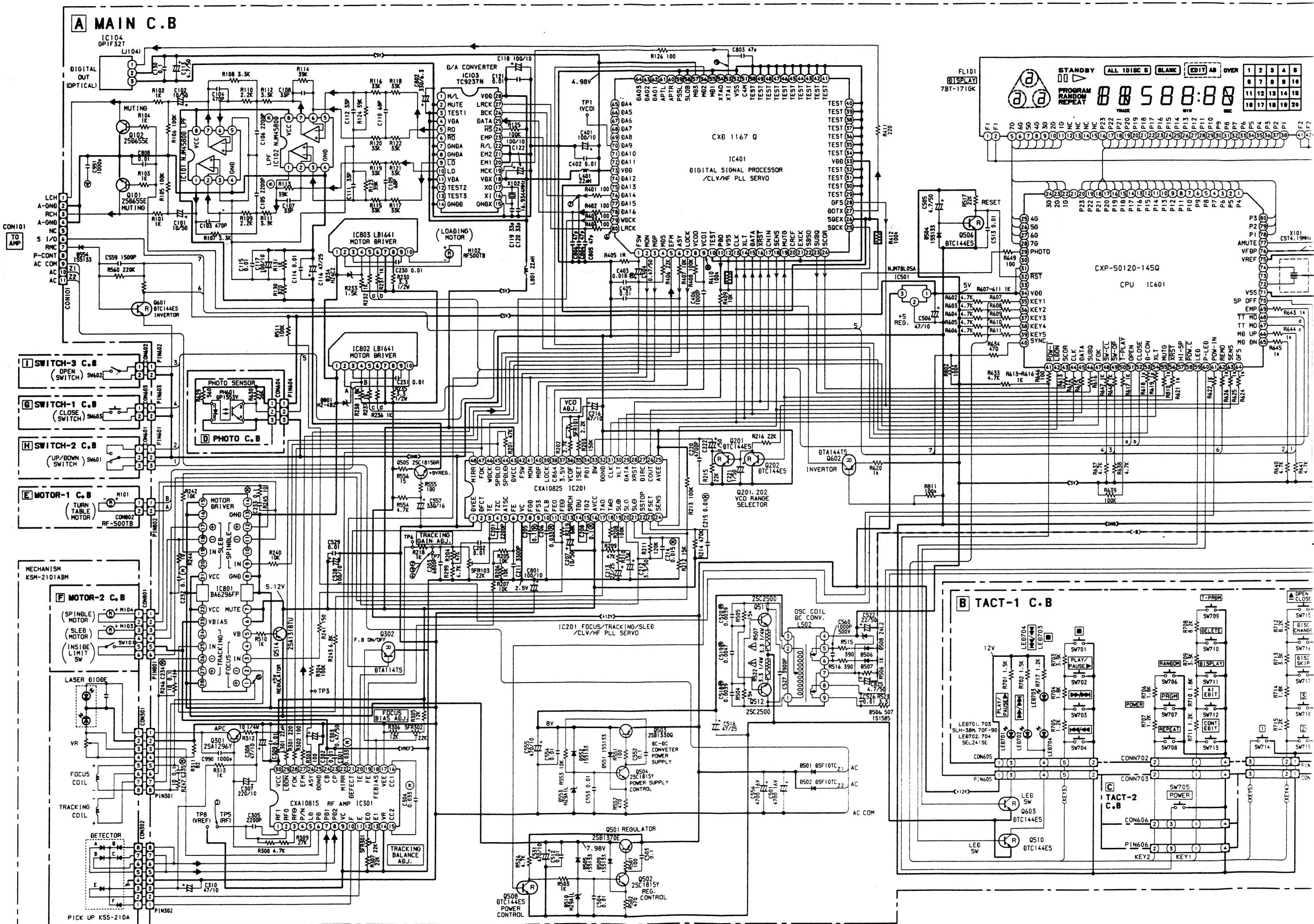
■ ACCESSORIES/PACKAGE LIST

PART NO CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
			INSTRUCTION BOOKLET EX	*	1
		1 ★82-VM1-902-010 2 ★87-064-129-010	HOLDER, F - CABLE 682		

BLOCK DIAGRAM

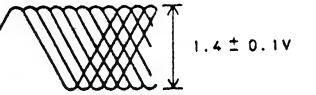


SCHEMATIC DIAGRAM



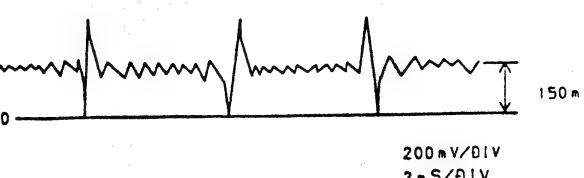
WAVE FORM

①

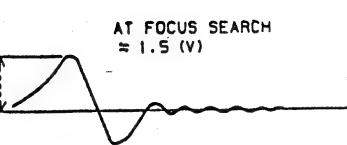


VP-P SHOULD BE APPROX. 1.4X.
WHEN PLAYING TRACK-2 OF YEOS-18.

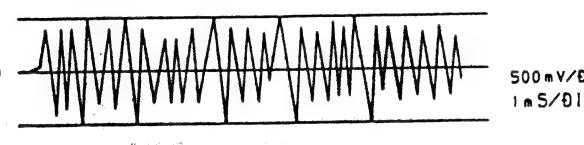
②



③

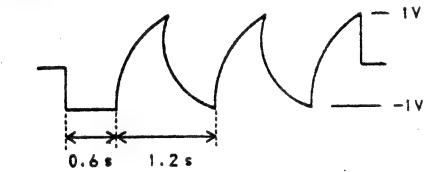


④

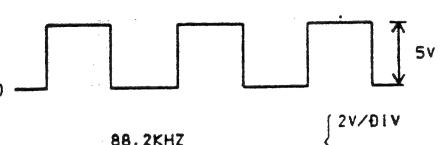


⑤

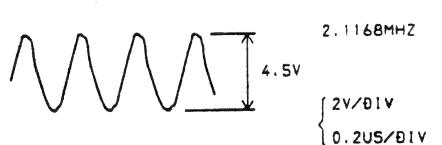
(WHEN VDD ON WITHOUT DISC AND TRAY IS CLOSED.)



⑥



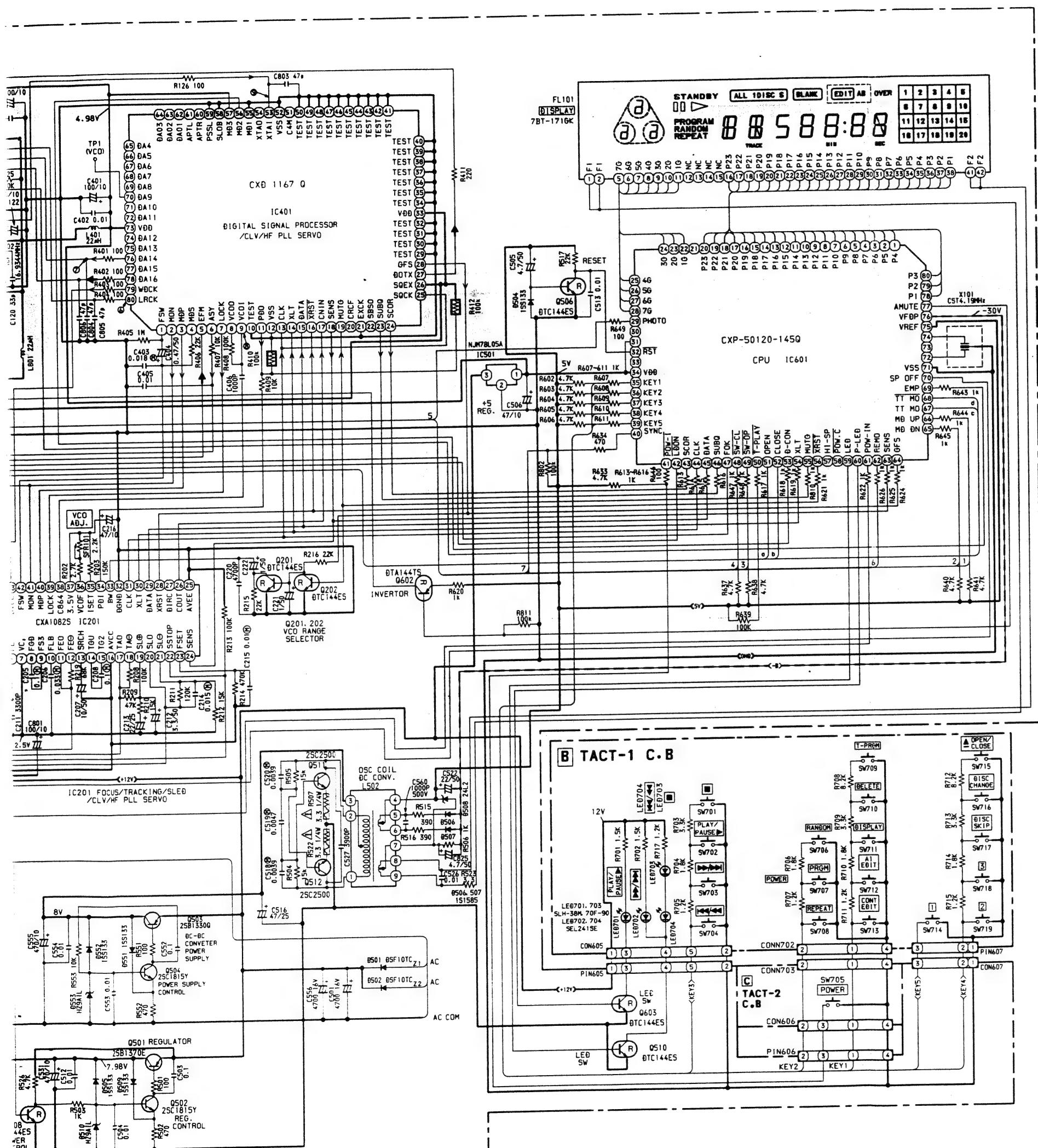
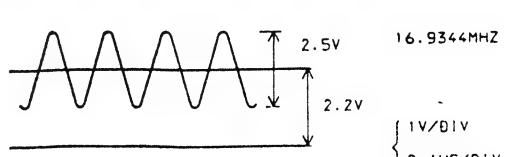
⑦

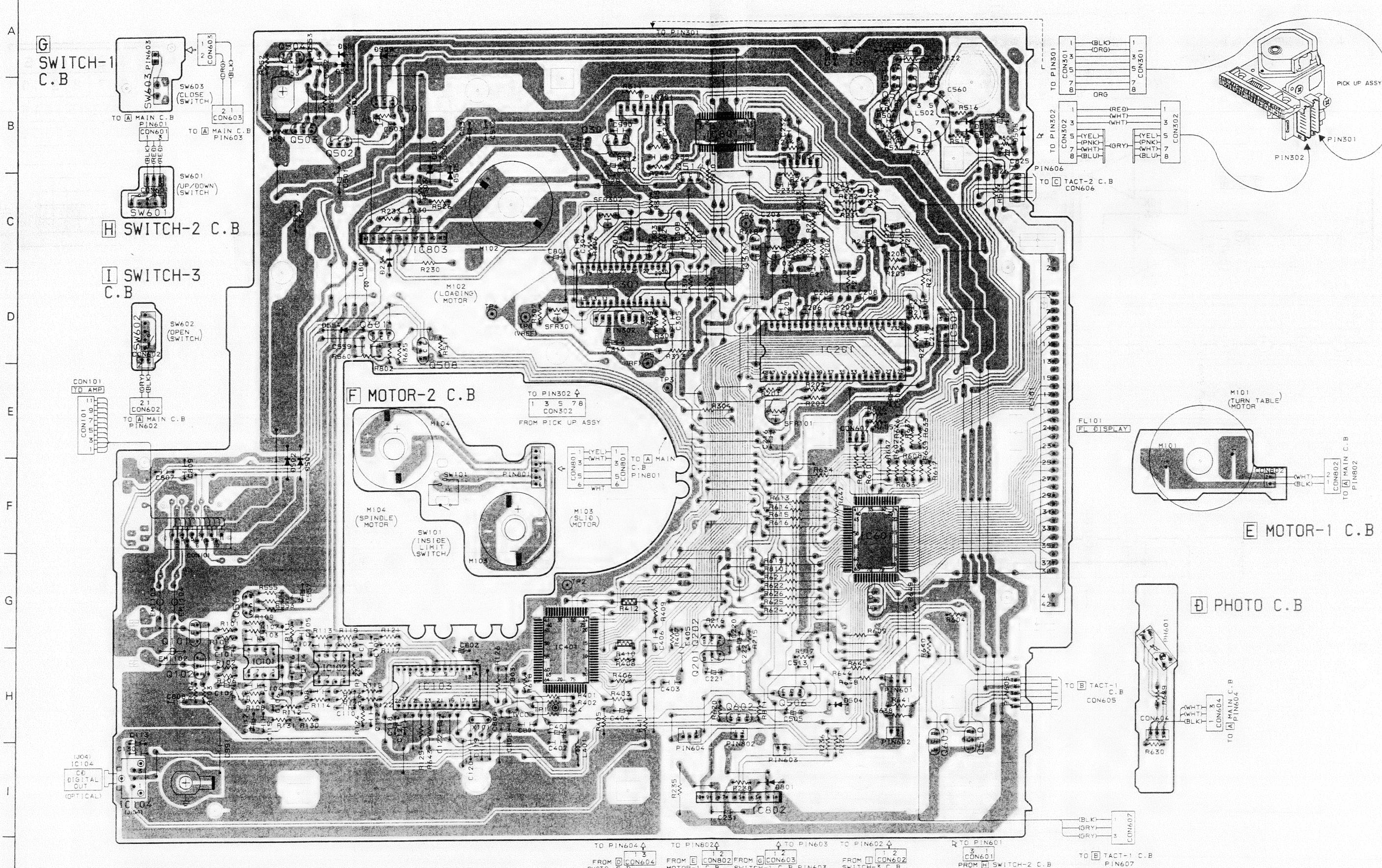


⑧



⑨

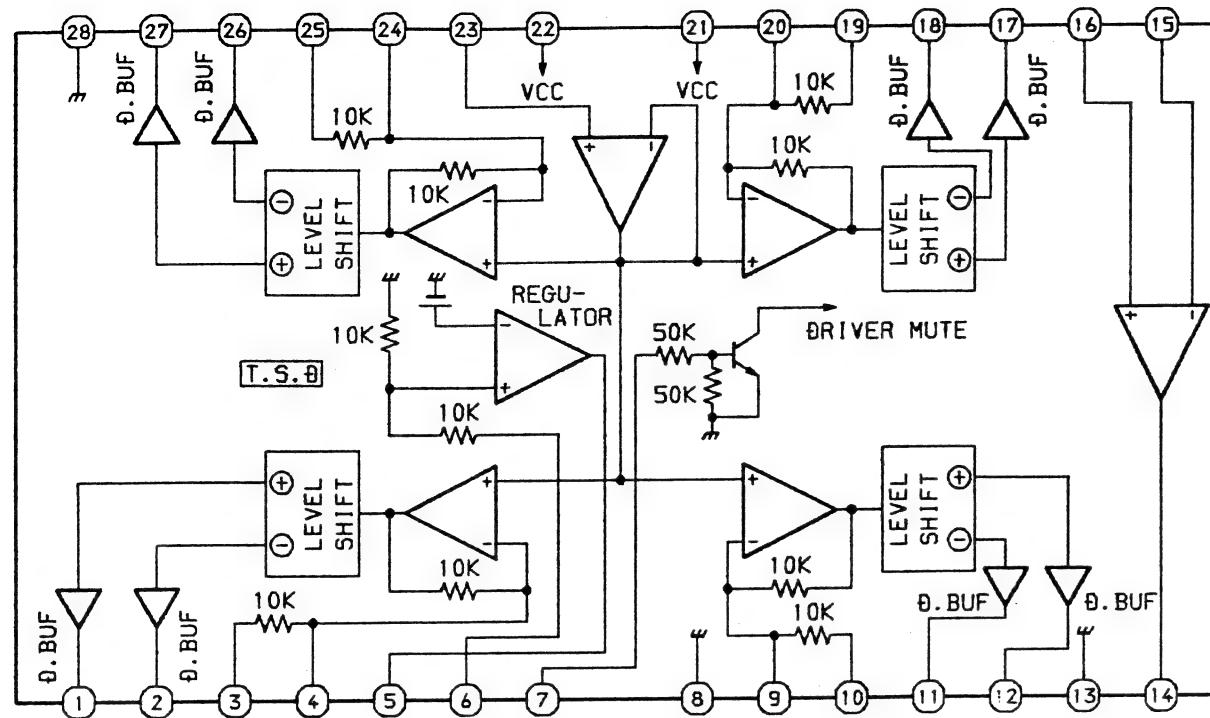




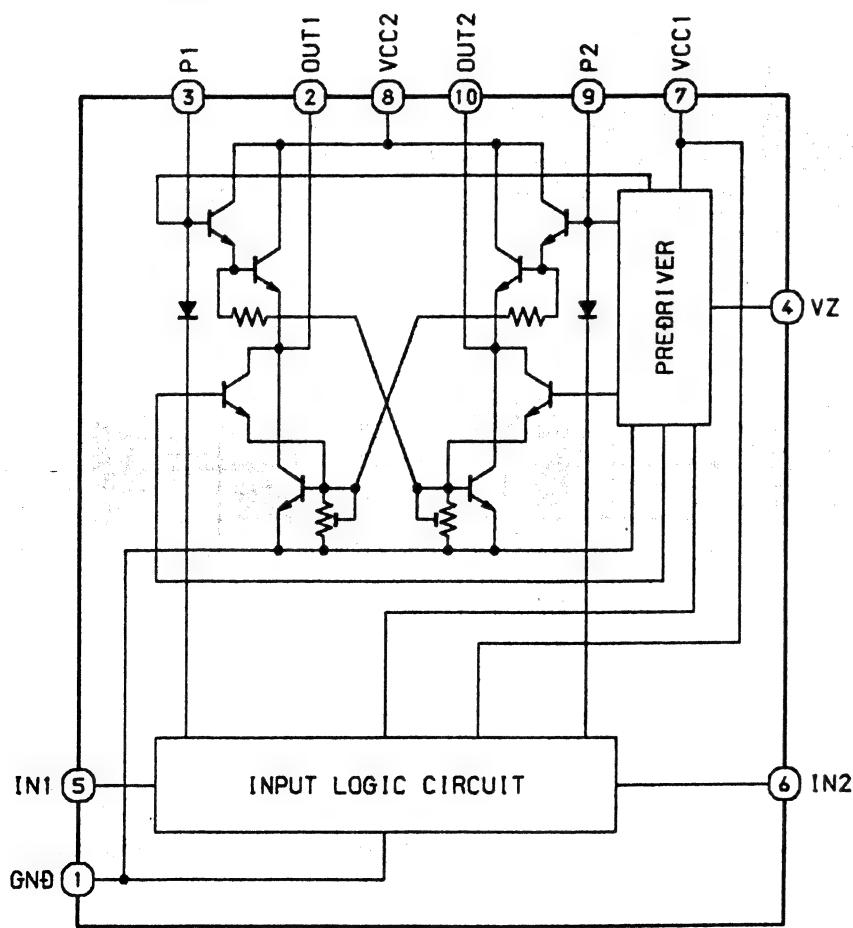
A MAIN C.B

IC BLOCK DIAGRAM

IC,BA6296FP

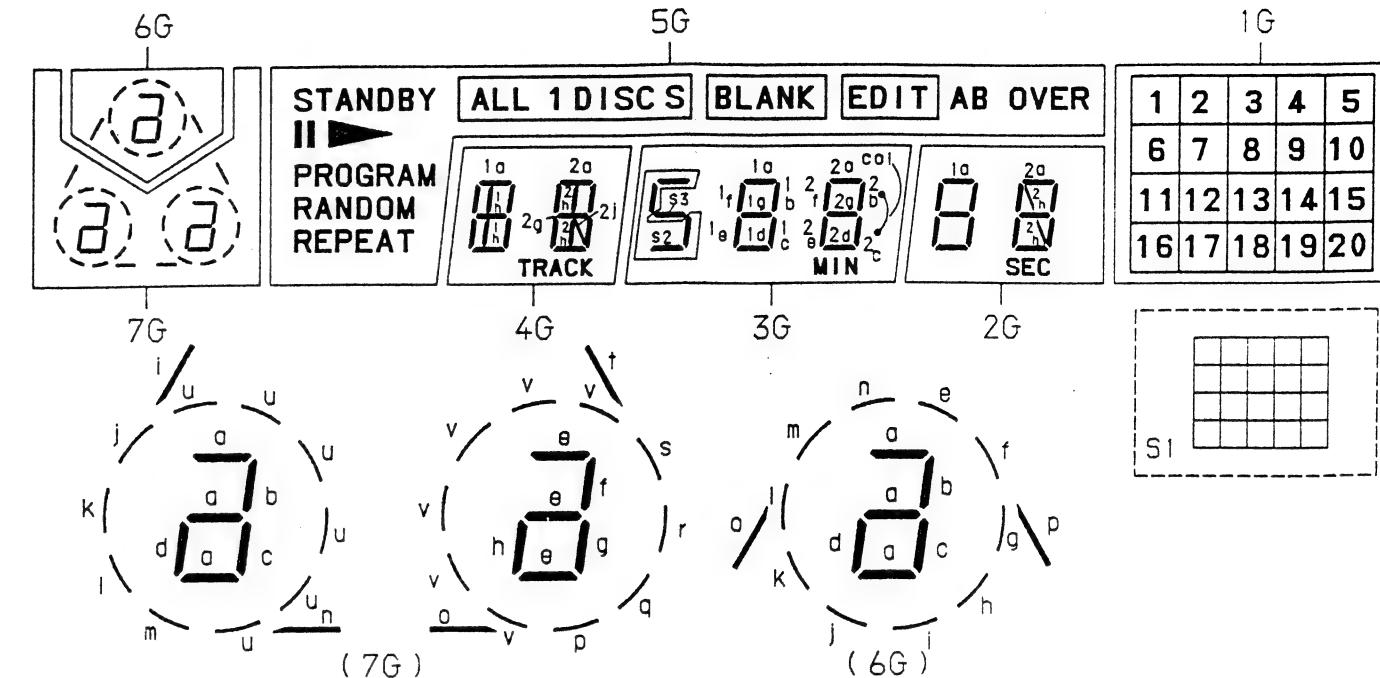


IC,LB1641



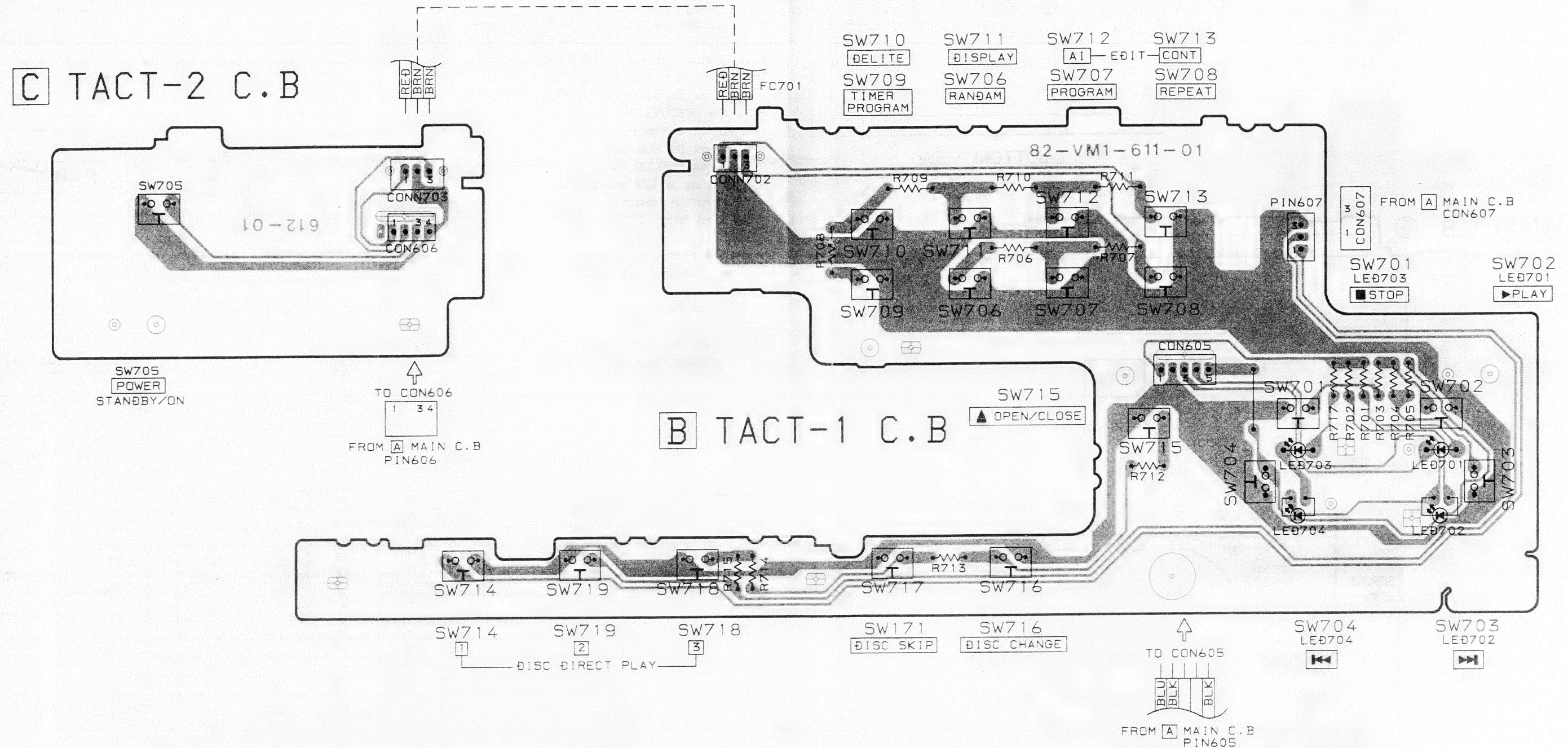
GRID ASSIGNMENT

FL101 7BT - 171GK



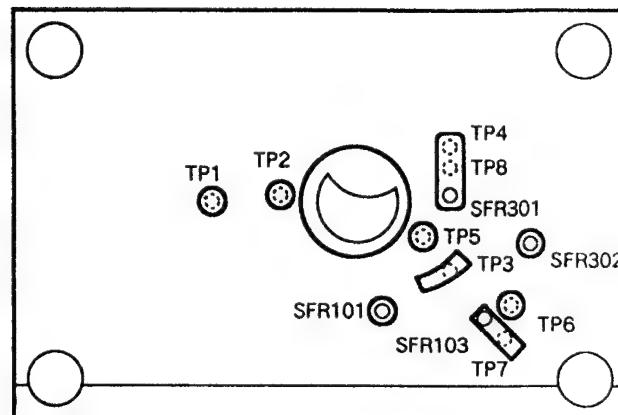
ANODE CONNECTION

	7G	6G	5G	4G	3G	2G	1G
P1	i	o	OVER	1a	1a	1a	1
P2	j	l	B	1b	1b	1b	2
P3	d	d	ALL S	1c	1c	1c	6
P4	b	e	1	1d	1d	1d	8
P5	a	a	DISC	1e	1e	1e	7
P6	l	n	EDIT	1f	1f	1f	4
P7	m	k	BLANK	1g	1g	1g	5
P8	k	m	A	1h	S2	—	3
P9	c	f	►	2a	2a	2a	9
P10	u	b	II	2b	2b	2b	10
P11	h	p	—	2c	2c	2c	14
P12	f	—	—	2d	2d	2d	17
P13	t	h	—	2e	2e	2e	16
P14	o	j	RANDOM	2f	2f	2f	12
P15	v	g	REPEAT	2g	2g	2g	13
P16	n	c	PROGRAM	2h	S3	2h	11
P17	e	l	—	2j	(col)	—	15
P18	s	—	—	TRACK	MIN	SEC	18
P19	g	—	—	—	—	—	19
P20	r	—	—	—	—	—	20
P21	q	—	—	—	—	—	S1
P22	p	—	—	—	—	—	—
P23	—	—	STANDBY	—	—	—	—

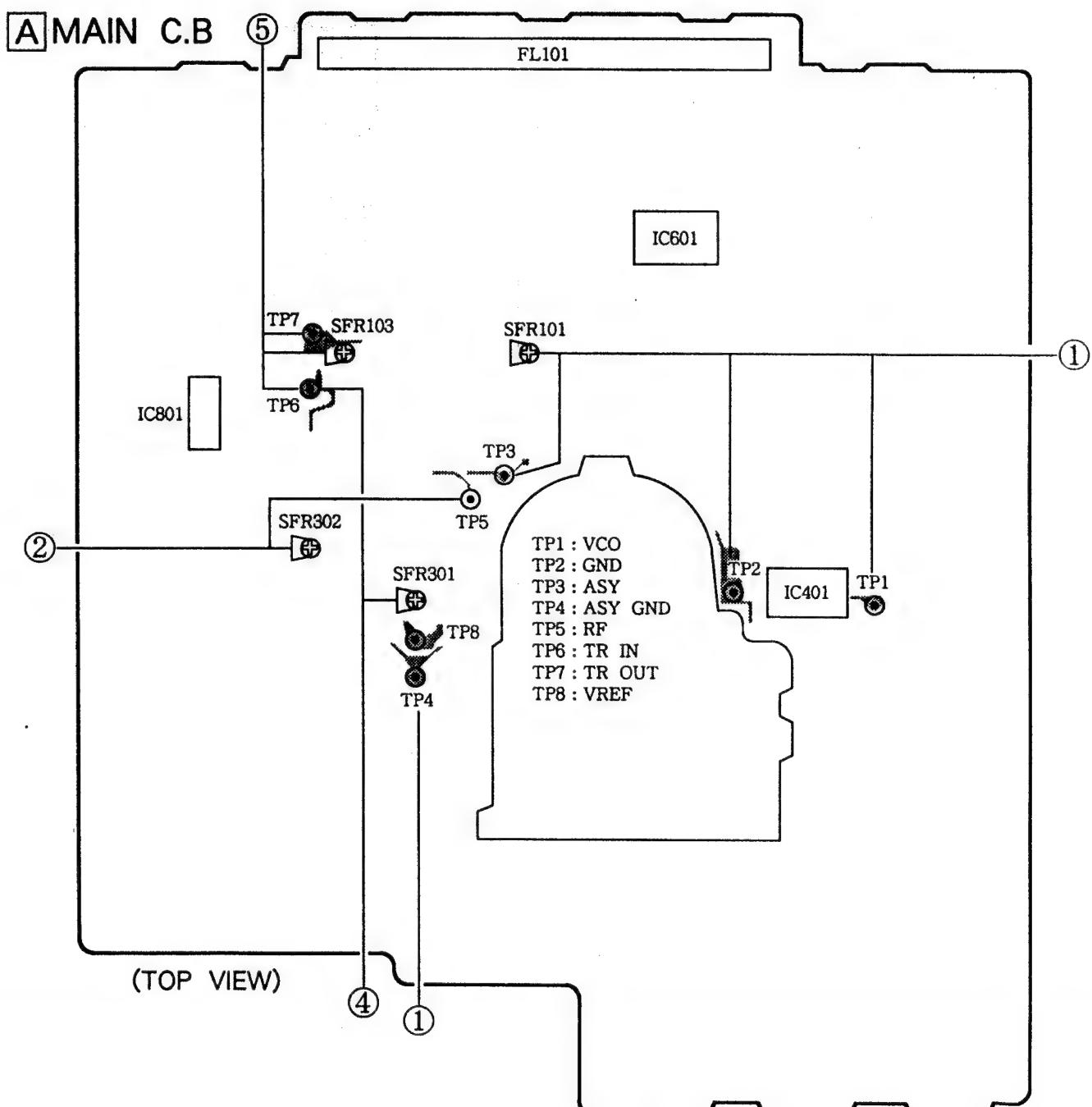
A
B
C
D
E
F
G
H
I
J
K

ADJUSTMENT

The bottom of DX-2950M has holes corresponding to the test points of the MAIN C.B.



(BOTTOM VIEW)



Note : • Connect a probe (10 : 1) of the frequency counter or the oscilloscope to a test point.
 • Connect the \ominus probe of the oscilloscope to TP8 (VREF) for each adjustment.

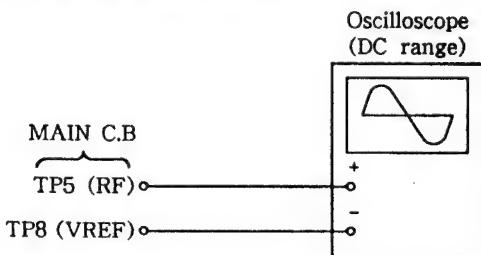
① VCO Frequency Adjustment

1. Connect and short between TP3 (ASY) and TP4 (ASY GND).
2. Connect the frequency counter to test points TP1 (VCO) and TP2 (GND).
3. When the power is off, turn the power on by pressing the OPEN/CLOSE and STOP/CLEAR keys at the same time. (All mode.)
4. Insert the disk and play it.
5. Adjust SFR101 (VCO) so that the frequency counter reading is 4.27 ± 0.02 MHz.
6. After the adjustment is completed, remove the short lead wires from TP3 (ASY) and TP4 (ASY GND).

Note : When releasing all lit up, disconnect the FG connector or turn the power off.

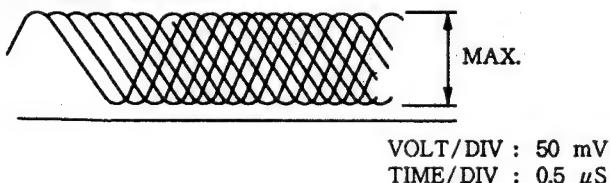
② Focus Bias Adjustment

Make the focus bias adjustment when replacing and repairing the optical block.



1. Connect an oscilloscope to test points TP5 (RF) and TP8 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Adjust SFR302 (F.B) so that the amplitude of waveform on the oscilloscope is maximized.

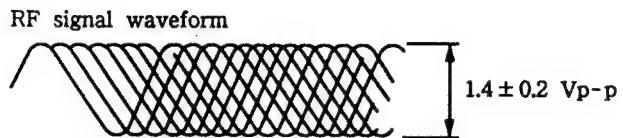
RF signal waveform



③ RF Waveform Check

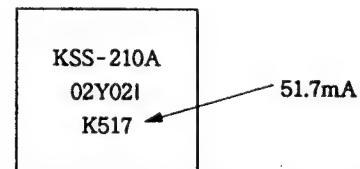
This check should be performed whenever the optical system block is replaced in repair.

1. Connect an oscilloscope to test points TP5 (RF) and TP8 (VREF).
2. Turn on the power switch.
3. Insert test disc TCD-782 (YEDS-18) and play back the second composition.
4. Check that the waveform appears as shown in the figure below.



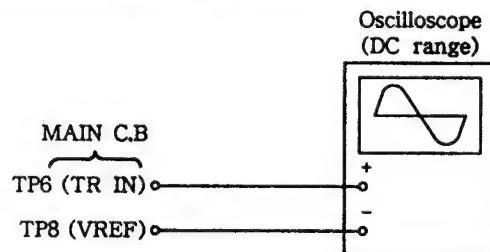
VOLT/DIV : 50 mV
 TIME/DIV : 0.5 μ s

Note : The current of the laser signal can be checked with the voltages on both sides of R312 (10Ω). The difference for the specified value shown on the label must be within ± 6.0 mA.

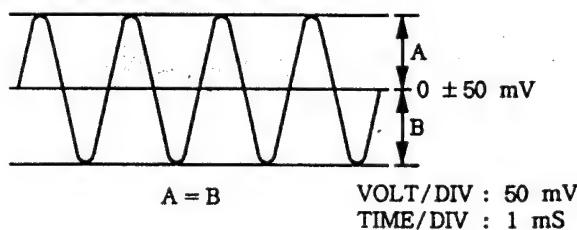


$$\text{Laser current } I_{op} = \frac{\text{Voltage across R312}}{10 \Omega}$$

④ Tracking Balance Adjustment



1. Set SFR103 (TG) to minimum.
2. Connect an oscilloscope to test points TP6 (TRIN) and TP8 (VREF).
3. Turn on the power switch.
4. Insert test disc TCD-782 (YEDS-18) and press the PLAY (►) button.
5. Press the FF key repeatedly.
6. Adjust SFR301 (TB) so that the waveform on the oscilloscope is vertically symmetrical as shown in the figure below.
7. After the adjustment is completed, remove the ground lead wires from the terminals.



⑤ Tracking Gain Adjustment

A servo analyzer is necessary in order to perform this adjustment exactly. However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment. Focus/tracking gain determines the pick-up follow-up (vertical and horizontal) relative to mechanical noise and mechanical shock when 2-axis device operates. However, as these gains are reciprocated, the adjustment is performed so that both gains are satisfied.

- When gain is raised, the noise increases when the 2-axis device operates.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.

When the gain adjustment is not satisfied, the symptoms below appear.

Symptoms	Gain	(Focus)	Tracking
● The time until music starts becomes longer for STOP→PLAY or automatic selection (◀▶ buttons pressed.) (Normally takes about 2 seconds.)		low	low or high
● Music does not start and disc continues to rotate for STOP→PLAY or automatic selection (◀▶ buttons pressed.)		—	low
● Disc stops to rotate shortly after STOP→PLAY.		low or high	—
● Sound is interrupted during PLAY. Or time counter display stops.		—	low
● More noises during the 2-axis device operation.	high		high

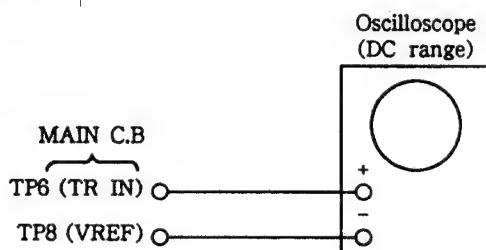
The following is simple adjustment method.

— Simple adjustment —

Note : Since the adjustment cannot be performed exactly, remember the positions of the controls before the adjustment and compare the adjusted position and the original position.

If the difference is a little, return the control to the original position.

Procedure :



1. Keep the set horizontal. (If the set is not kept horizontally, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Insert test disc TCD-782 (YEDS-18) and play back the second composition.

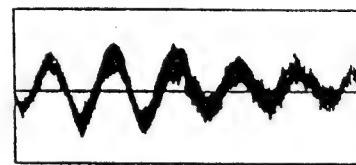
3. Connect an oscilloscope to TP6 (TR IN) of the main board.
4. Adjust SFR103 (TG) so that the waveform appears as shown in the figure below.(tracking gain adjustment)



VOLT/DIV : 50 mV
TIME/DIV : 1 mS

- Incorrect example (The fundamental wave appears as compared with the waveform adjusted.)

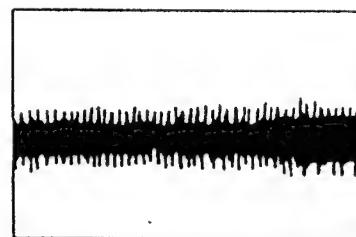
Low tracking gain



VOLT/DIV : 50 mV
TIME/DIV : 1 mS

High tracking gain

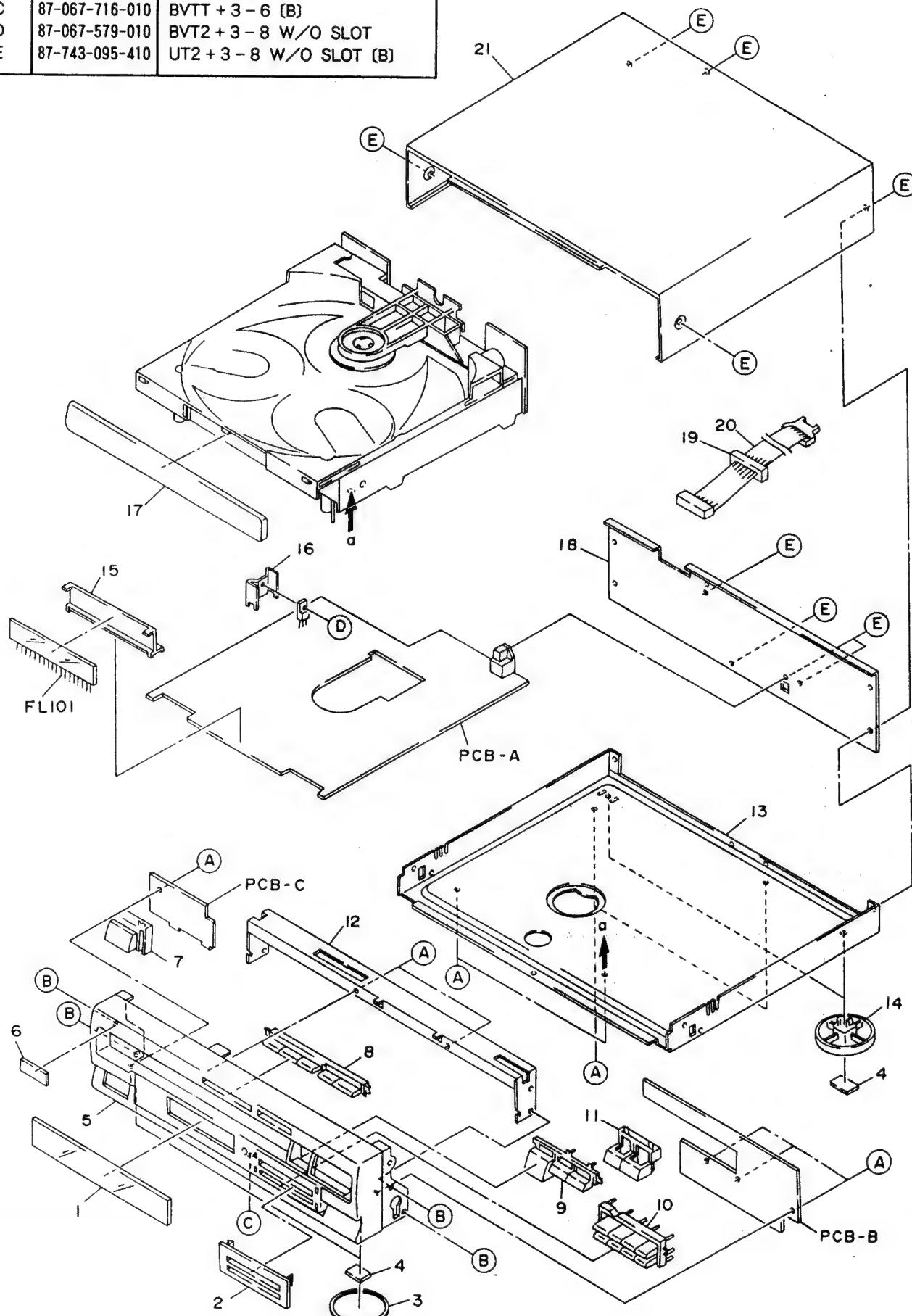
The frequency of the fundamental wave is higher than that in low gain.



VOLT/DIV : 50 mV
TIME/DIV : 1 mS

EXPLODED VIEW – 1

REF. NO.	PART NO.	DESCRIPTION
A	87-067-703-010	BVT2 + 3 – 10 W/O SLOT
B	87-591-094-410	QIT + 3 – 6
C	87-067-716-010	BVTT + 3 – 6 (B)
D	87-067-579-010	BVT2 + 3 – 8 W/O SLOT
E	87-743-095-410	UT2 + 3 – 8 W/O SLOT (B)

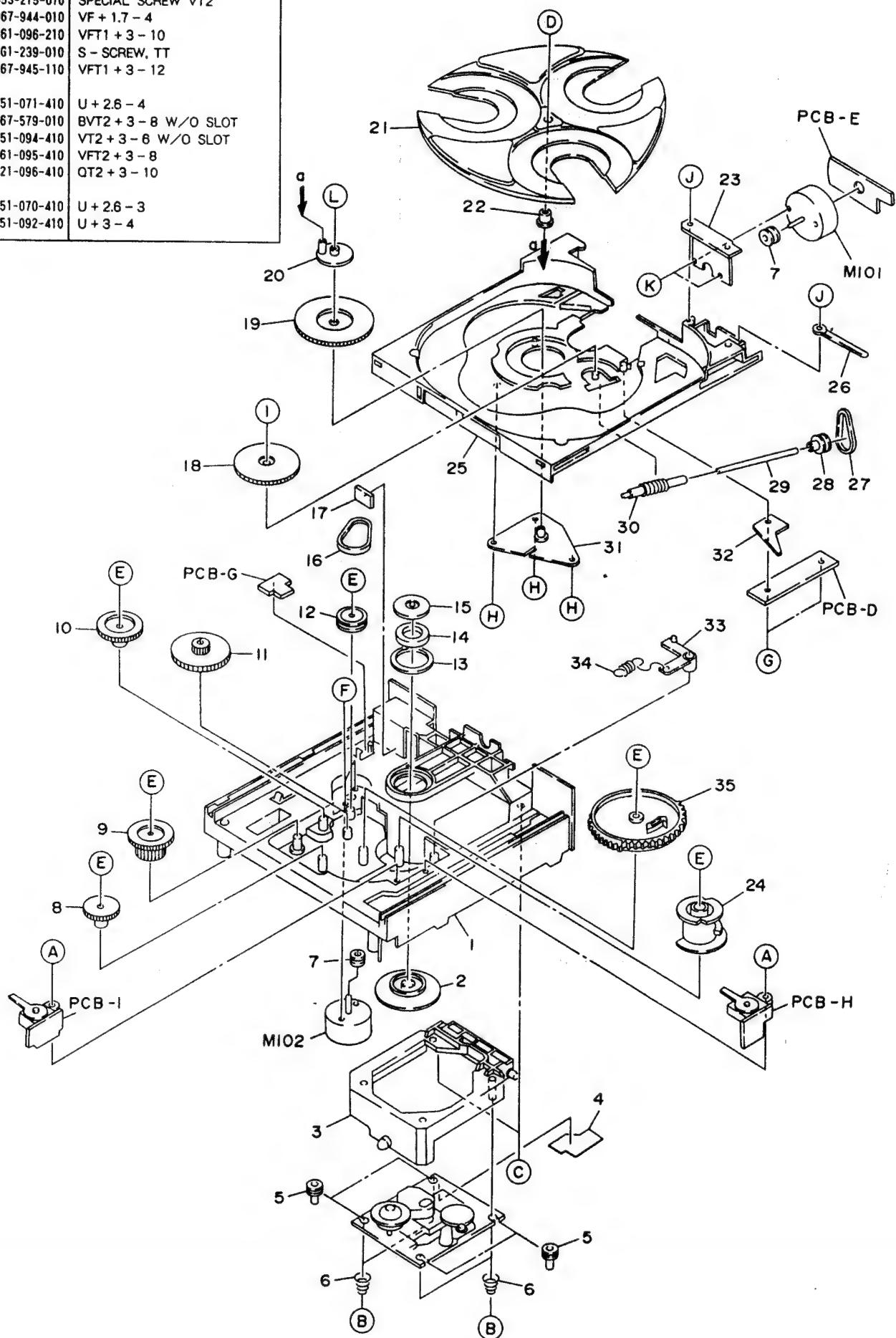


MECHANICAL PARTS LIST

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
1-1		★82-VM1-011-010	WINDOW	※	1
1-2		★82-VM1-012-010	PANEL, PROGRAM	※	1
1-3		★81-VW1-015-010	RING, FOOT		2
1-4		★81-VW1-201-010	FELT 20 - 15 - 2		4
1-5		★82-VM1-001-010	CABINET, FRONT	※	1
1-6		★81-DS1-011-019	BADGE, AIWA		1
1-7		★82-VM1-007-010	KEY, POWER	※	1
1-8		★82-VM1-006-010	KEY, DISC	※	1
1-9		★82-VM1-005-010	KEY, SEARCH	※	1
1-10		★82-VM1-008-010	KEY, PROGRAM	※	1
1-11		★82-VM1-004-010	KEY, PLAY	※	1
1-12		---	CHASSIS, FRONT		1
1-13		---	CHASSIS, MAIN		1
1-14		★81-VX1-012-019	FOOT, REAR		2
1-15		★81-VM1-203-010	GUIDE, FL		1
1-16		---	HEAT SINK		1
1-17		★82-VM1-010-010	PANEL, TRAY	※	1
1-18		★82-VM1-009-010	PANEL, REAR (Y)	※	1
1-18		★82-VM1-015-110	PANEL, REAR (YNE)	※	1
1-19		★89-VT5-202-010	BUSHING, CORD		1
1-20		★89-VX5-618-010	FLAT CABLE 11P FG		1
1-21		★82-VM1-002-010	CABINET, STEEL (Y)	※	1
1-21		★82-VM1-021-018	CABINET, STEEL (YNE)	※	1

EXPLODED VIEW - 2

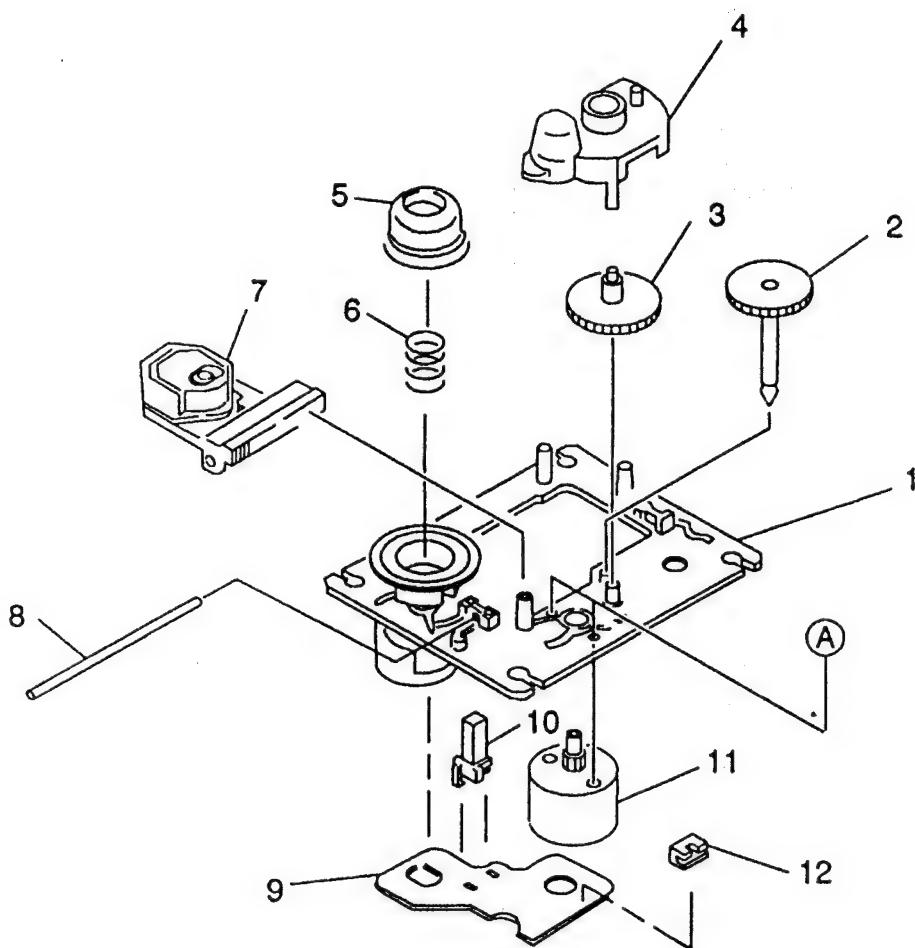
REF. NO.	PART NO.	DESCRIPTION
A	81-653-215-010	SPECIAL SCREW VT2
B	87-067-944-010	VF + 1.7 - 4
C	87-561-096-210	VFT1 + 3 - 10
D	81-ZG1-239-010	S - SCREW, TT
E	87-067-945-110	VFT1 + 3 - 12
F	87-251-071-410	U + 2.6 - 4
G	87-067-579-010	BVT2 + 3 - 8 W/O SLOT
H	87-751-094-410	VT2 + 3 - 6 W/O SLOT
I	87-761-095-410	VFT2 + 3 - 8
J	87-721-096-410	QT2 + 3 - 10
K	87-251-070-410	U + 2.6 - 3
L	87-251-092-410	U + 3 - 4



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q'TY
	2-1	★81-ZG1-201-010	CHASSIS, MECHANISM		1
	2-2	★81-ZG1-228-010	HOLDER, MAGNET		1
	2-3	★81-ZG1-226-010	MECHANISM HOLDER ASSY		1
	2-4	★81-ZG1-241-010	SHEET, CD MECHANISM		1
	2-5	★81-ZG1-230-010	G - CUSHION, MECHANISM		4
	2-6	★81-ZG1-231-010	C - SPRING, MECHANISM		4
	2-7	★81-ZG1-212-010	PULLEY, LOADING MOTOR		2
	2-8	★81-ZG1-209-010	GEAR, TRAY RELAY		1
	2-9	★81-ZG1-208-010	GEAR, TRAY B		1
	2-10	★81-ZG1-207-010	GEAR, TRAY A		1
	2-11	★81-ZG1-210-010	GEAR, RELAY		1
	2-12	★81-ZG1-211-010	PULLEY, RELAY		1
	2-13	★81-ZG1-242-010	SHEET, MAGNET		1
	2-14	★86-531-219-010	MAGNET, CLAMPER		1
	2-15	★81-ZG1-229-010	PLATE, MAGNET		1
	2-16	★81-ZG1-232-010	BELT, TRAY		1
	2-17	★81-ZG1-238-010	CUSHION, TRAY IN		1
	2-18	★81-ZG1-222-010	WORM WHEEL, TT		1
	2-19	★81-ZG1-202-010	GEAR, MAIN		1
	2-20	★81-ZG1-224-010	TT LEVER ASSY		1
	2-21	★81-ZG1-002-010	TURNTABLE		1
	2-22	★81-ZG1-219-010	SHAFT, TRAY		1
	2-23	★81-ZG1-215-010	HOLDER, MOTOR		1
	2-24	★81-ZG1-206-010	GEAR, MECHANISM CAM		1
	2-25	★81-ZG1-001-010	TRAY		1
	2-26	---	BINDER, WIRE		1
	2-27	★81-ZG1-233-110	BELT, TT		1
	2-28	★81-ZG1-236-010	PULLEY, TT MOTOR		1
	2-29	★81-ZG1-216-010	SHAFT, WORM		1
	2-30	★81-ZG1-221-010	WORM GEAR, TT		1
	2-31	★81-ZG1-225-010	TRAY PLATE ASSY		1
	2-32	★81-ZG1-240-010	P - SPRING, WORM		1
	2-33	★81-ZG1-213-010	PLATE, CAM		1
	2-34	★81-ZG1-235-010	E - SPRING, CAM		1
	2-35	★81-ZG1-205-110	GEAR, TRAY CAM		1

EXPLODED VIEW – 3

REF. NO	PART NO.	DESCRIPTION
A	87-261-032-210	V+ 2-3



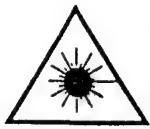
PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q. TY
3-1	★9X-262-513-310	TT CHASSIS ASSY (W/MOTOR)			1
3-2	★92-625-188-020	GEAR, A			1
3-3	---	GEAR, B			1
3-4	★92-625-544-010	COVER			1
3-5	92-625-187-010	RING, CENTER			1
3-6	★92-625-191-010	SPRING, COMPRESSION			1
3-7	98-848-127-110	PICK UP KSS – 210A			1
3-8	★94-917-565-010	SHAFT, SLED			1
3-9	---	MOTOR PWB			1
3-10	91-572-085-110	SWITCH, LEAF (LIMIT)			1
3-11	★9X-262-513-210	SLED MOTOR ASSY			1
3-12	★91-564-722-110	CONNECTOR 6P			1

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Aviso: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion.
Undgå utsættelse for stråling.

VAROITUS!

Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saattaa altistaa käytäjän turvallisuusluokan 1 yliittävälle näkymättömälle lasersäteilylle.

VARNING!

Om apparaten används på annat sätt än vad som specificeras i denna bruksanvisning, kan användaren utsättas för osynlig laserstråling, som överskrider gränsen för laserklass 1.

CAUTION

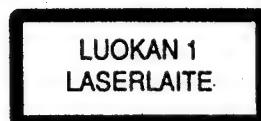
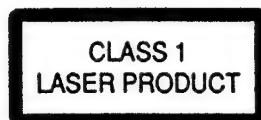
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

ATTENTION

L'utilisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

This Compact Disc player is classified as a CLASS 1 LASER product.

The CLASS 1 LASER PRODUCT label is located on the rear exterior.



SPECIFICATIONS

Disc	Compact disc
Scanning method	Non-contact optical scanner (semiconductor laser application)
Laser	Semiconductor laser ($\lambda = 750\text{-}800\text{ nm}$)
Rotation speed	Approx. 500 rpm – 200 rpm (CLV)
Error correction	Cross Interleave, Reed Solomon code
No. of channels	2 channels
D-A conversion	1-bit DAC
Wow/Flutter	Unmeasurable
Signal to noise ratio	92 dB (1 kHz, 0 dB)
Harmonic distortion	0.01% (1 kHz, 0 dB)
Low pass filter	8 times digital filter + active filter
Power consumption	15 W
Dimensions (WxHxD)	360 x 98.5 x 308 mm (14 $\frac{1}{4}$ x 4 x 12 $\frac{1}{4}$ in)
Weight	3.8 kg (8.4 lb)

- Design and specifications are subject to change without notice.

ALTERATION PARTS LIST

REF. NO. PART NO. DESCRIPTION

==IC==

82-VM1-601-110 IC, CXP50120-1590

■ ACCESSORIES/PACKAGE LIST

PART NO.	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
CHANGED TO					
1	★82-VM1-901-218	IB (Y NE)			1
2	★82-VM1-902-110	IB (Y)			1
3	★82-VM1-903-119	IB (YJ)			1
4	★82-VM1-905-018	IB (Z7000M)			1

DISSASEMBLY INSTRUCTIONS

1. "Cabinet, Steel" Removal (See Figure-1)
 - 1) Remove 5 screws (Ⓐ) and remove "Cabinet, Steel".
2. "Cabinet, Front" Removal (See Figure-1)
 - 1) Remove 5 screws (Ⓑ×4, Ⓣ×1) and remove the "Cabinet, Front".
3. "Panel, Rear" Removal (See Figure-1)
 - 1) Remove 4 screws (Ⓓ) and remove the "Panel, Rear".
4. "Mechanism ASSY" Removal (See Figure-2)
 - 1) Remove 5 screws (Ⓐ) and remove the "Mechanism ASSY".

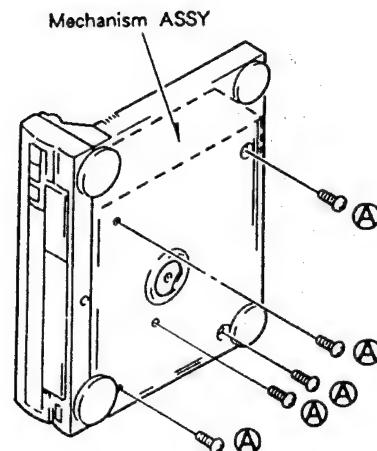
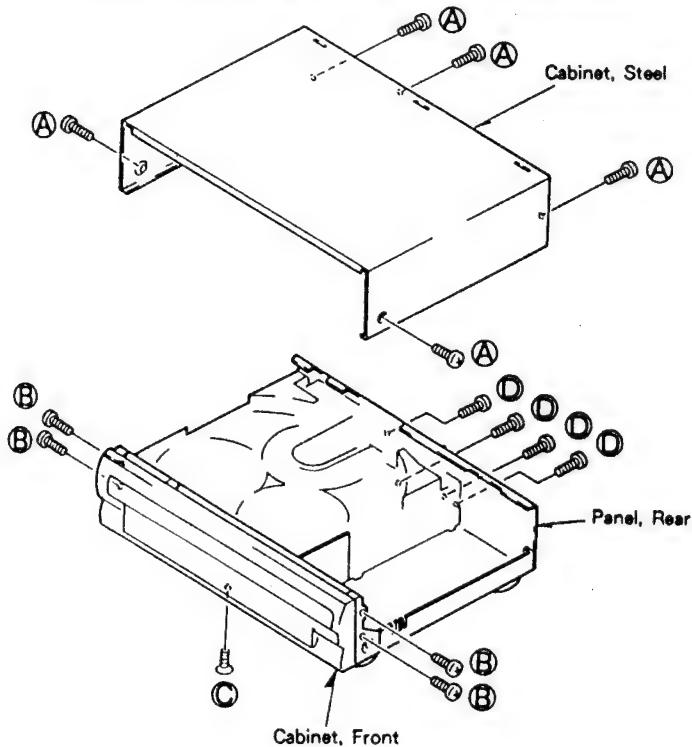


Fig - 2

Fig - 1

5. "Main Circuit Board" Removal (See Figure - 3)

- 1) Remove 6 hooks unsolder the soldered points and raise the "Main Circuit Board".
- 2) Remove 8 connectors and remove the "Main Circuit Board" in the direction of the arrow.

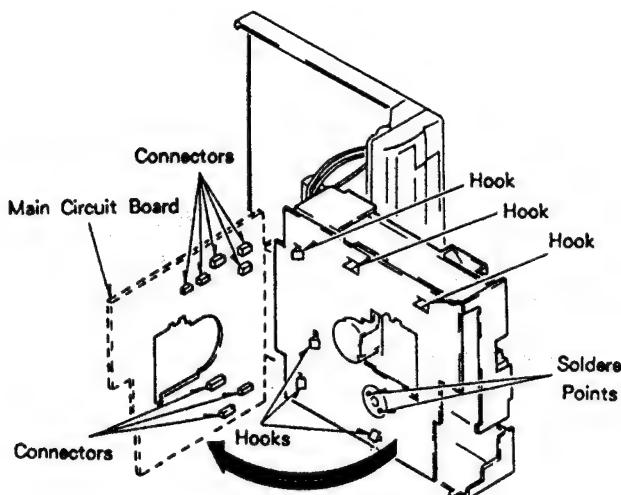


Fig - 3

6. "Tray" Removal (See Figure - 4)

- 1) Open the "Tray".

★ To open manually

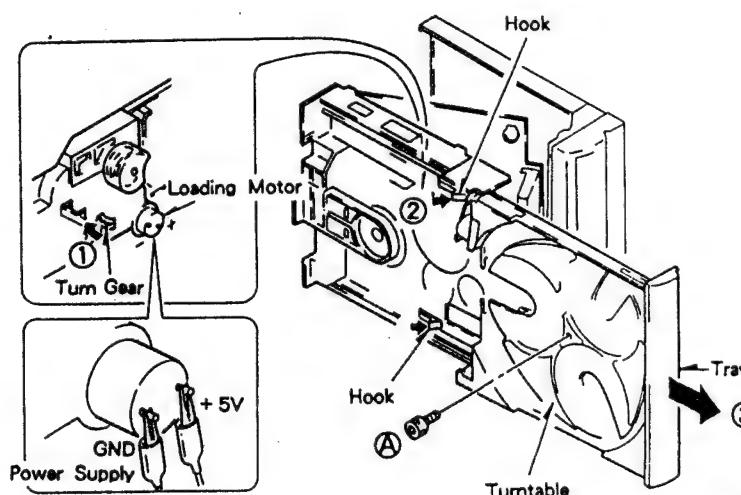
Turn gear in the direction of arrow ① with your fingers.

★ To open automatically

Connect the power supply to the loading motor and open the "Tray".

- 2) While pushing the hook in the direction of the arrow ② as shown in the figure, remove the "Tray" in the direction of arrow ③.

- 3) Remove screw ④ and remove the "Turntable".



7. "Tray" and Each Gear Setting (See Figure - 5)

- 1) Align the "Cam, Gear Mechanism" and "Cam, Plate" as shown in the figure.
- 2) Adjust SW so that it comes to position Ⓐ when performing.
- 3) Attach "Cam, Gear Tray" so that mark Ⓒ is positioned as shown in the figure.
- 4) Insert "Tray" so that the aligning mark of "Tray A, Gear" is opposite the first tooth of "Rack, Tray".

Note) If SW is at position Ⓑ (when "Tray" is open.), reset the cams so that SW comes to position Ⓐ.

If SW is not positioned correctly, "Tray" and chucking do not work well.

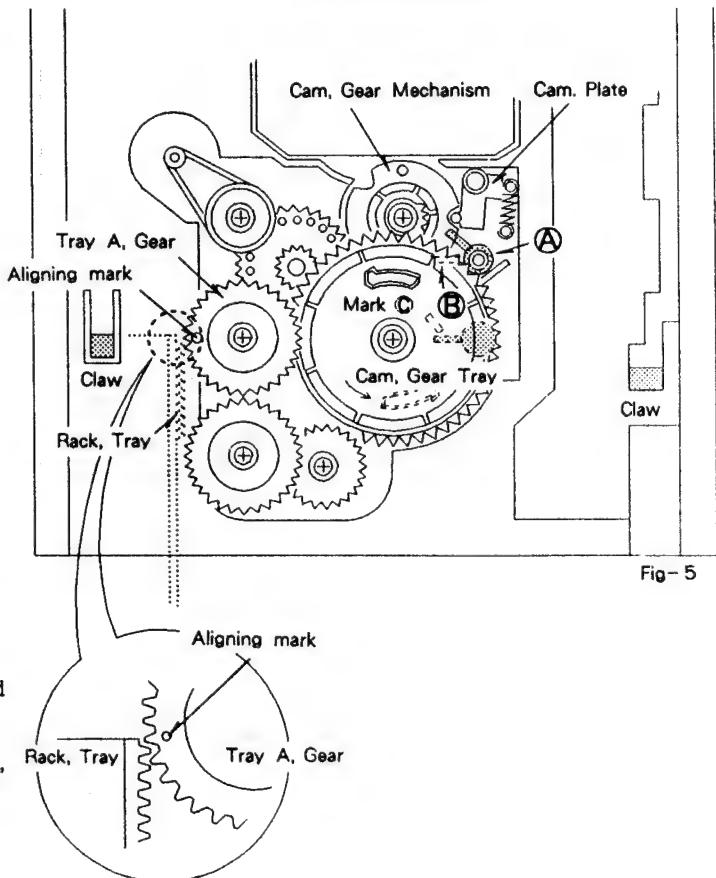
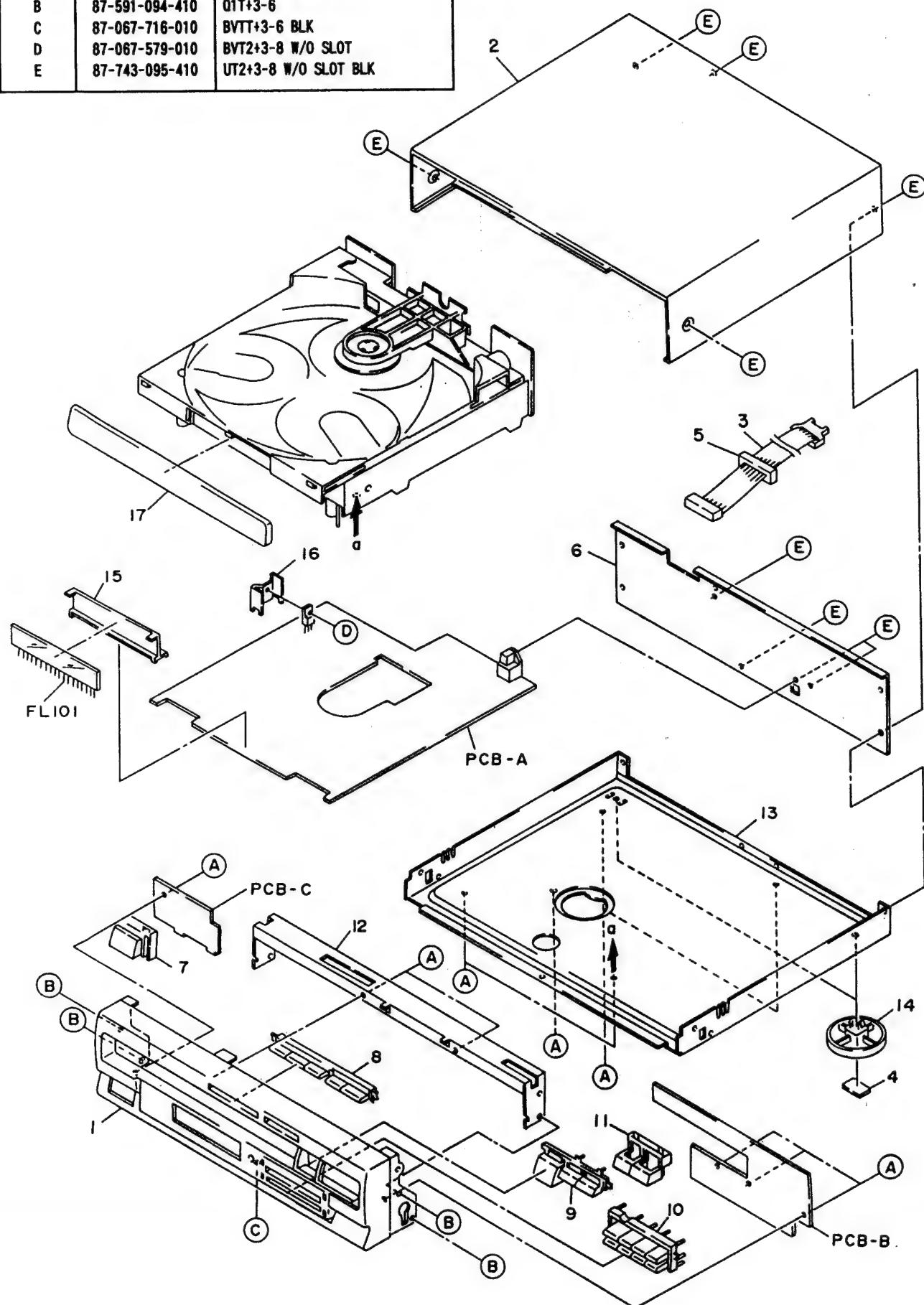


Fig - 5

EXPLODED VIEW – 1

REF. NO.	PART NO.	DESCRIPTION
A	87-067-703-010	BVT2+3-10 W/O SLOT
B	87-591-094-410	Q1T+3-6
C	87-067-716-010	BVTT+3-6 BLK
D	87-067-579-010	BVT2+3-8 W/O SLOT
E	87-743-095-410	UT2+3-8 W/O SLOT BLK



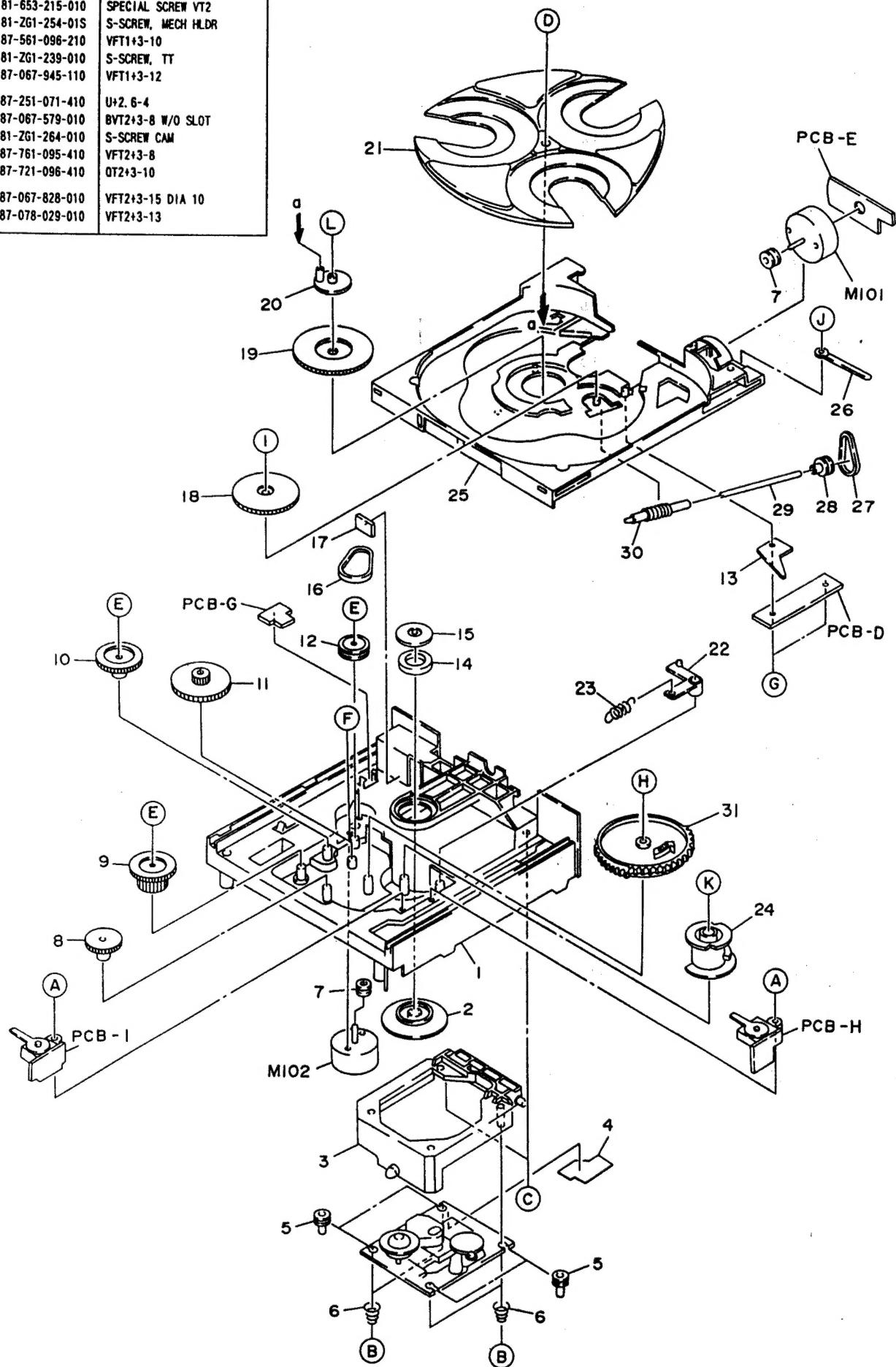
MECHANICAL PARTS LIST

DESCRIPTIONで判断できない物は最終ページの"REFERENCE NAME LIST"を参照してください。
If can't understand for Description please kindly refer to "REFERENCE NAME LIST".

PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
	1-1	★09-057-175-010	CAB, FRONT ASSY (Z950M YJ)	*	1
	1-1	★09-057-185-010	CAB, FRONT ASSY (Z7000M)	*	1
	1-2	★82-VM1-002-010	CAB, STEEL (Z950M YJ)	*	1
	1-2	★82-VM1-021-018	CAB, STEEL (Z7000M)	*	1
	1-3	★89-VX5-618-010	FLAT CABLE 11P FG		1
	1-4	★81-VW1-201-010	FELT 20-15-2		2
	1-5	★89-VT5-202-010	BUSHING, CORD		1
	1-6	★82-VM1-013-219	PANEL, REAR YJBN (Z950M YJ)	*	1
	1-6	★82-VM1-027-019	PANEL, REAR YBNE (Z7000M)	*	1
	1-7	★82-VM1-007-010	KEY, POWER	*	1
	1-8	★82-VM1-006-010	KEY, DISC	*	1
	1-9	★82-VM1-005-010	KEY, SEARCH	*	1
	1-10	★82-VM1-008-010	KEY, PRGM	*	1
	1-11	★82-VM1-004-010	KEY, PLAY	*	1
	1-12	---	CHAS, FR		1
	1-13	---	CHAS, MAIN		1
	1-14	★81-VX1-012-019	FOOT, REAR		2
	1-15	★81-VM1-203-010	GUIDE, FL		1
	1-16	---	HT-SINK		1
	1-17	★82-VM1-010-010	PANEL, TRAY	*	1

EXPLODED VIEW – 2

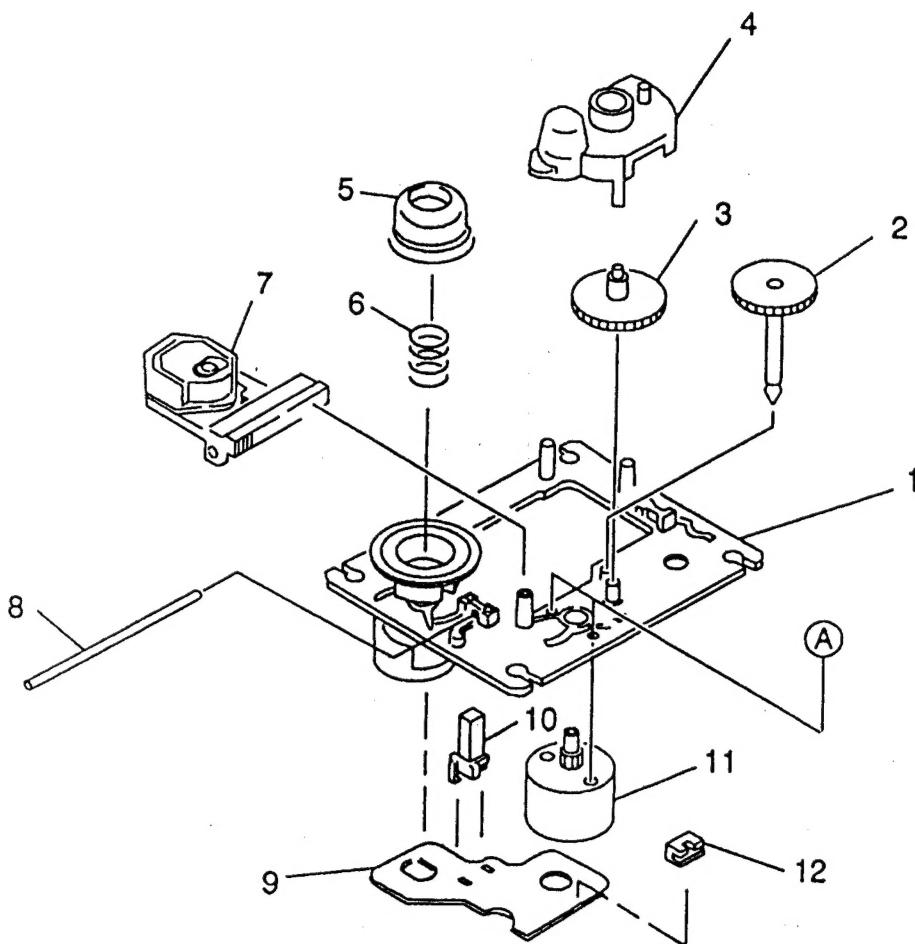
REF.	PART NO.	DESCRIPTION
A	81-653-215-010	SPECIAL SCREW VT2
B	81-ZG1-254-01S	S-SCREW, MECH HLDR
C	87-561-096-210	VFT1+3-10
D	81-ZG1-239-010	S-SCREW, TT
E	87-067-945-110	VFT1+3-12
F	87-251-071-410	U+2.6-4
G	87-067-579-010	BVT2+3-8 W/O SLOT
H	81-ZG1-264-010	S-SCREW CAM
I	87-761-095-410	VFT2+3-8
J	87-721-096-410	OT2+3-10
K	87-067-828-010	VFT2+3-15 DIA 10
L	87-078-029-010	VFT2+3-13



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
	2-1	★81-ZG1-243-119	CHAS, MECH NO2		1
	2-2	★81-ZG1-228-010	HLDR, MAGNET		1
	2-3	★81-ZG1-253-01S	HLDR MECH MK2		1
	2-4	★81-ZG1-241-010	SH, CD MECH		1
	2-5	★81-ZG1-230-010	G - CUSH, MECH		4
	2-6	★81-ZG1-231-010	SPR - C, MECH		4
	2-7	★81-ZG1-212-010	PULLY, LOAD MO		2
	2-8	★81-ZG1-250-019	GEAR, TRAY RELAY MK2		1
	2-9	★81-ZG1-257-019	GEAR, TRAY B MK2		1
	2-10	★81-ZG1-256-019	GEAR, TRAY A MK2		1
	2-11	★81-ZG1-251-019	GEAR, RELAY MK2		1
	2-12	★81-ZG1-211-010	PULLEY, RELAY		1
	2-13	★81-ZG1-240-010	SPR - P, WORM		1
	2-14	★86-531-219-010	MAGNET, CLAMPER		1
	2-15	★81-ZG1-255-01S	PLATE, MAGNET MK2		1
	2-16	★81-ZG1-232-010	BELT, TRAY		1
	2-17	★81-ZG1-238-010	CUSH, TRAY IN		1
	2-18	★81-ZG1-222-010	WORM WHEEL, TT		1
	2-19	★81-ZG1-202-010	GEAR, MAIN		1
	2-20	★81-ZG1-252-010	LEVER, TT MK2		1
	2-21	★81-ZG1-008-119	TURNTABLE, NO2		1
	2-22	★81-ZG1-213-010	PLATE, CAM		1
	2-23	★81-ZG1-235-010	SPR - E CAM		1
	2-24	★81-ZG1-206-010	GEAR, MECH CAM		1
	2-25	★81-ZG1-011-019	TRAY, MK2		1
	2-26	★87-038-039-010	WIRE BINDER		1
	2-27	★81-ZG1-233-110	BELT, TT		1
	2-28	★81-ZG1-236-010	PULLEY, TT MO		1
	2-29	★81-ZG1-260-019	SHAFT, WORM S		1
	2-30	★81-ZG1-221-010	WORM GEAR, TT		1
	2-31	★81-ZG1-205-110	GEAR, TRAY CAM		1

EXPLODED VIEW - 3

REF. NO.	PART NO.	DESCRIPTION
A	87-261-032-210	V+2-3



PART NO. CHANGED TO	REF. NO.	PART NO.	DESCRIPTION	COMMON MODEL	Q.TY
3-1	★9X-262-513-310		TT CHASSIS ASSY (W/MOTOR)		1
3-2	★92-625-188-020		GEAR, A		1
3-3	---		GEAR, B		1
3-4	★92-625-544-010		COVER		1
3-5	92-625-187-010		RING, CENTER		1
3-6	★92-625-191-010		SPRING, COMPRESSION		1
3-7	98-848-127-110		PICK UP KSS - 210A		1
3-8	★94-917-565-010		SHAFT, SLED		1
3-9	---		MOTOR PWB		1
3-10	91-572-085-110		SWITCH, LEAF (LIMIT)		1
3-11	★9X-262-513-210		SLED MOTOR ASSY		1
3-12	★91-564-722-110		CONNECTOR 6P		1